

# TRANSCRIPT

## LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

### **Inquiry into Climate Resilience**

Emerald – Thursday 10 October 2024

#### **MEMBERS**

Ryan Batchelor – Chair

David Ettershank – Deputy Chair

Melina Bath

Gaelle Broad

Jacinta Ermacora

Wendy Lovell

Sarah Mansfield

Rikkie-Lee Tyrrell

Sheena Watt

#### **PARTICIPATING MEMBERS**

John Berger

Ann-Marie Hermans

Evan Mulholland

Rachel Payne

Richard Welch

## WITNESSES

Warren Smith, Coordinator, Climate Change and Heritage, Cardinia Shire Council;

Kim O'Connor, Director, Built Environment and Infrastructure, Yarra Ranges Council; and

Helen Steel, Chief Executive Officer, and

Daniel Pleiter, Operations Manager, South East Councils Climate Change Alliance.

**The CHAIR:** I declare open the Legislative Council Environment and Planning Committee's public hearing on climate resilience in Victoria. The Environment and Planning Committee is a cross-party committee of the Parliament. This inquiry is looking into climate resilience and the resilience of our built environment to climate change here in Victoria. Part of this inquiry is accepting evidence in public hearings. We have accepted submissions, and we will be providing a report to the Parliament, which we hope will contain recommendations to the government. For everyone who is joining us here today: if people could just make sure their mobile phones are switched to silent and try and keep our background noise minimised.

I will begin by acknowledging the traditional owners of the land we are meeting on here today, and I pay my respects to elders past and present and also my respects to any Aboriginal and Torres Strait Islander Australians who are joining us as part of these proceedings. I welcome those who are joining us from the public gallery. I remind everyone in the gallery to be respectful of proceedings at all times so we can have a productive session. I welcome anyone who is watching on the public broadcast.

Welcome to the representatives of the local government areas and the councils climate change alliance. I will just begin by reading a little statement about the evidence. All evidence that we take is protected by parliamentary privilege as provided by the *Constitution Act 1975* and the provisions of the Legislative Council standing orders. Therefore the information that you provide during the hearing is protected by law. You are protected against any action for what you say during the hearings, 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 the Parliament.

As you can see, all evidence is being recorded. You will be provided with a proof version of the transcript following the hearings. Transcripts will ultimately be made public and posted on the committee's website.

Thank you for joining us today. My name is Ryan Batchelor. I am the Chair of the Environment and Planning Committee and Member for the Southern Metropolitan Region in the Legislative Council. I might ask the committee members to introduce themselves, starting with our Deputy Chair.

**David ETTERS HANK:** Hi. David Ettershank, Western Metropolitan Region and Deputy Chair of the committee.

**Gaëlle BROAD:** Hi, I am Gaëlle Broad, Member for Northern Victoria Region.

**Wendy LOVELL:** Wendy Lovell, Member for Northern Victoria Region.

**Melina BATH:** Melina Bath, Member for Eastern Victoria Region.

**John BERGER:** John Berger, Member for Southern Metro.

**The CHAIR:** And online we have –

**Jacinta ERMACORA:** Jacinta Ermacora, Member for Western Victoria.

**The CHAIR:** Thank you, members of the committee. For our witnesses: one by one, if you could just state your name and the organisation you are appearing on behalf of for the Hansard record, please.

**Warren SMITH:** My name is Warren Smith. I am the Coordinator of Climate Change and Heritage at Cardinia Shire Council.

**Kim O'CONNOR:** Kim O'Connor, Yarra Ranges council, and I am the Director of Built Environment and Infrastructure.

**Helen STEEL:** Helen Steel. I am the Chief Executive Officer of the South East Councils Climate Change Alliance.

**Daniel PLEITER:** Hi, I am Dan Pleiter. I am the Operations Manager for the South East Councils Climate Change Alliance.

**The CHAIR:** Welcome, and thanks for joining us today. I might just invite you to make a short opening statement if you would like to do so, and then the committee will get into questions. I do not know who wishes to start.

**Warren SMITH:** I am happy to kick off. Warren Smith from Cardinia shire. Cardinia shire is an interface council and growth area located 50 kilometres from the CBD. We are in the south-east and have 1281 square kilometres of land that we cover. The shire is one of 10 interface councils on the perimeter of metropolitan Melbourne, providing that transition between urban and rural. Our estimated population as of 2024 is 135,000, and we are forecast to grow to 182,000 by 2041. The majority of Cardinia's population is located within the urban areas of Beaconsfield, Officer and Pakenham. These areas are within the Casey–Cardinia south-east growth corridor and will accommodate most of the future residential and employment growth, including a state-significant industrial precinct. The remainder of the population is located within our 38 townships – one of which we are in today – and rural residential areas. Geographically the northern part of the shire is the foothills of the Dandenong Ranges, where we stand today, and includes Bunyip State Park, Cardinia Reservoir, Koo Wee Rup swamp and our significant Western Port, which is home to Cardinia. We also host state-significant, high-quality agricultural land. Council is committed to being a livable, resilient community where the environment flourishes and residents are healthy, included and connected.

In September 2019 Cardinia shire declared a climate emergency. We were not the first, and there have been a number of councils to declare a climate emergency. The shire has a long history of working on emission reduction and climate change adaptation, with the goal to work towards increasing the resilience of our community and adapting the capacity of our shire. This is in response to strong local community engagement and the scientific consensus about rising global temperatures. A critical issue for the shire and all councils is the physical impact of climate change, and we are seeing that on the ground here in Cardinia shire. The impacts have adverse effects on our triple bottom line, as we know, and affect our livelihoods, our recreation, our tourism and our social cohesion.

Cardinia shire is no stranger to the projected impacts of climate change and extreme weather events. Our shire has been significantly impacted by the Black Saturday fires in 2009, the Bunyip State Park fires in 2019 and more recently the storms of February 2024. We have also been prone to significant floods, like in 2012, when we had record rainfall, basically a month worth of rainfall in one day, and we are also prone to coastal inundation and erosion.

It is fair to say a climate change approach requires an all-levels-of-government approach to the adverse consequences of climate changes, and we are really seeing that capacity built within our communities, but we believe there should be more. We acknowledge the Victorian government has taken significant steps through Victoria's climate change adaptation plan and the *Climate Change Act 2017* to address climate change and its impacts, but we believe the state should continue to fund strategic resources – investment in proactive outcomes for our communities rather than reactive.

In terms of the built form, council requests the implementation of statewide controls for a number of built-form issues. These include ESD, flooding and coastal management and other areas. Instead of relying on individual councils to go it alone, that collective response I think would be highly encouraged. We have seen bushfire management overlays and the bushfire practice adopted across the state, and we basically would like to see more of that statewide approach.

This inquiry is timely, and I thank you for the opportunity for Cardinia shire to present. We are also here with the South East Councils Climate Change Alliance. That is an alliance of eight councils that work collectively, together with our community of 1.2 million people, to undertake significant adaptation measures that really improve our community's health and wellbeing and respond to the impacts of climate change across our region.

**The CHAIR:** Thank you.

**Kim O'CONNOR:** Good morning. As I said, my name is Kim O'Connor. Chair, committee members, thank you for the opportunity to speak today. We have got 13 recommendations as part of our submission, and I can go through those as part of this introduction or we can take them as read, but I am here today to talk about and discuss climate resilience and what faces Yarra Ranges Shire Council and more broadly local government. Yarra Ranges council is a municipality that is unique in its size, complexity and disaster profile. It is the second most impacted in terms of disasters across 479 local governments in Australia. That is underscoring the need for a comprehensive and forward-thinking strategy to enhance our climate resilience. Local governments such as ours play a pivotal role in managing community, and it is important around the involvement that councils have with the community when we are dealing with climate resilience and our infrastructure and also looking at our recovery requirements in terms of the after-effects of a disaster. Our proximity to the community in times of crisis gives us an invaluable insight into the real-world impacts of climate change, particularly in how the consequences of climate change might be mitigated through prioritised, robust and resilient infrastructure investment and community enablement.

We acknowledge that there are no static solutions in this dynamic environment. Climate change is an evolving challenge. For example, rainfall intensity projections, which were initially forecast to increase by 18.5 per cent in a one-in-100-year event are now expected to be up to 30 per cent increases, so we have got to be adaptable and agile to those. The shifts demand a rapid and agile response, particularly as we balance community expectations with the reality of increased flood risks. Urban heat, bushfires and soil subsidence are all increasing in frequency and impact. Local councils need targeted flood modelling to identify areas of greatest vulnerability, prioritise infrastructure investments and reduce flood risks in those locations. With limited resources and many areas to address, it is essential that we focus on places of most risk and where there are hazards. We cannot do it alone. We need strong centralised data analytics to prioritise and sustainably fund for resilience and community education. Planning is an important tool, but even the best planned areas will face flooding based on geographical reality. As we adapt, we need a comprehensive suite of analysis tools to manage these risks and build long-term community resilience.

Yarra Ranges council is one of those councils, similar to Cardinia, where it varies significantly. So we look at the climates in Melbourne, then we look at the impact on the Dandenongs, and then we go out to look at Coldstream and the valley. We get impacted in different ways. It is not just one climate experience that the Yarra Ranges council will have in a given year, let alone for long-term projections, so it is about being mindful around that as well.

Touching on those 13 recommendations, we look at ensuring appropriate and recurrent funding, stabilising the funding so we know what we can plan for and centralising education guidelines and support – that is important. Something that is very simple when it comes to flooding – I will refer to that – is having the local community understand what the drainage networks look like. Roads are part of drainage networks.

It is understanding what the impacts may be in terms of the different levels of risk. We also look at support and improved hazard mapping and prioritising funding for critical evacuation routes. We have invested significantly in sealing roads. We are supported with federal government money in doing that, and we have been able to actually seal \$47 million of that. We have also identified another \$20 million of unsealed network that contains important evacuation routes where we need to work with opportunities to see how we can actually deliver that.

Lead planning scheme amendments – looking at the state to lead planning scheme amendments. We are currently going through and looking at an EMO within existing areas of the Dandenongs. Elevated environmentally sustainable development – the ESD elements that you raised earlier. A progressive Victorian action plan for the management of green wedge land and agricultural land. We need to continue to advocate for significant increases in funding and risk mitigation with national disaster funds – so when we are impacted it is the recovery that we need to look at and the funding arrangements there. Yarra Ranges has had five claimable events in the last 12 months, so it has a significant impact, and it is close to \$9 million, of which probably 20 per cent we cannot recover through those funds. So it does have an impact on municipalities.

**Wendy LOVELL:** Sorry, can you just repeat that statistic? How many events?

**Kim O'CONNOR:** Five.

**Wendy LOVELL:** In what period?

**Kim O'CONNOR:** Twelve months. And they are claimable events. It is approximately \$9 million of impact.

Dedicated funding programs – so making sure that we have dedicated programs in place. Supporting the implementation of Victorian climate resilient council programs. And the state database for vulnerable and at-risk communities – create that database and put in better targeted resources for that. And lastly, the Yarra Ranges council calls upon the state to inquire into the insurability of private homes and government assets. We are finding that is a significant challenge in the municipality following these events.

So in conclusion, Yarra Ranges welcomes the inquiry and the opportunity to share insights with the Victorian state government. With the right funding tools and partnerships we can significantly improve our capacity to manage climate risks and protect our communities, so thank you again.

**The CHAIR:** Thanks very much. Helen.

**Helen STEEL:** Good morning. Thank you for the opportunity to address the committee. I will provide the opening address, and my colleague Dan is here also to help answer any questions. I thought I would start by just giving you a little bit of background into the Victorian greenhouse alliances. SECCCA, or the South East Councils Climate Change Alliance, is one of those alliances which were established 20 years ago from state government funding to create a network of statutory agencies to assist local government associations in meeting their emissions reduction targets across their services, operations and assets. We are one of eight greenhouse gas alliances in Victoria. The SECCCA councils are actually nine councils, from the City of Port Phillip to Bass Coast shire and including the Shire of Cardinia. Yarra Ranges is a member of the eastern alliance.

Just to give you a bit of a snapshot of what the SECCCA region encompasses: we are home to 1.5 million Victorians, we produce \$85 billion in gross regional product, we produce about 45 per cent of Victoria's manufactured product and we are a really interesting mix of metropolitan, peri-urban and rural communities, with some of the fastest growing residential developments on the fringe of Melbourne, which my colleague from Cardinia touched on. We also, interestingly, represent a third of Victoria's coastline. Most of our councils have declared a climate emergency, with all of our councils actually identifying climate change as the number one risk to their communities.

I thought I would also share, as part of the consultation process that we recently did, some of the biggest challenges that are facing councils today. I am sure none of this will come as a surprise to you, but the biggest concerns they have are around their continued ability to insure council and community assets – and that is not to mention communities being able to insure their homes and businesses. They are also concerned with the litigation that they may face with regard to perceived lack of duty of care to the community, given the information and data that they have, particularly with regard to climate change. They are also enormously concerned about the enormous costs associated with the upgrading of their assets and infrastructure, not only for a net-zero future but also to ensure a climate-resilient future. We are not just talking about the \$1.5 trillion that has been identified in terms of energy infrastructure, but we are talking about being able to have resilient drainage, stormwater systems, roadways, transport, housing and building upgrades.

It is the role of SECCCA as a collective and an alliance to identify areas of common interest and provide efficiencies and economies of scale in developing evidence-based tools and methodologies that each of our members can embed into their operations. Today we sit on a wealth of data and evidence that is supporting our councils to do that, to better understand the vulnerabilities they have with regard to climate events and to better understand and identify the risks associated with climate change and how they can reduce the impacts on their assets and ability to deliver their services.

We highlighted a number of things in our submission, including not just around the risks but some of the solutions that we are working towards as a collective to help and assist our councils. Just to highlight some of those, we not only take them through and support them through the climate impact analysis and risk assessment work but we help them with their vulnerability assessments, their criticality assessments, the damage-to-cost curve analysis and adaptation options, and we provide them with a business case and economic analysis.

One of the other new areas – or newer areas, I guess – that we are focusing on is helping them consider financing options, and that is beyond publicly available funding. We know that there are a lot of financial constraints at all levels of government, so how can we actually consider some of the opportunities that exist with upgrading these assets and looking at them in potential terms of investable assets: is there the ability to actually seek private funding or institutional funding that could actually service and support the upgrades that are required?

Some of the other observations, and I am sure, again, none of this will be a surprise: local government certainly is the most under-represented level of government in terms of policy discussions and yet it is the level of government dealing with the physical impacts of climate change. It is also the most accessible level of government often to the community and where community is turning to for solutions. I think that that just really highlights the importance of these discussions, and I guess we really welcome the state government including local government as part of this submission and these hearings. It is certainly our ambition to work with the SECCCA councils to embed this work in it and for it to become business as usual so that our members are effectively building climate change resilience into their operations and that we continue to support a prosperous region. Thank you.

**The CHAIR:** Thanks very much. We will take it in turns for questions, with about 5 minutes or so each, and we will just go through. I might start. Obviously the presentations talk about the range of events – the range of disaster events – that this part of the world has had to face. One of the reasons the committee was so keen to come out to the ranges at Emerald was because there have been communities out here that have endured a lot in the last few years and we wanted to particularly get out and talk firsthand with local representatives about what those experiences have been like. But then how do we make some useful recommendations about improving responses in the future, particularly focused on the built environment? There is a lot we could talk about in terms of emergency management and disaster response, but our task here is to look at the built environment.

One of the things that has been mentioned is risk. There is a lot that we could do, but obviously government is always a prioritisation task. I am interested in how you currently assess risk and how you think we could assess risk in the future so we can make prioritisation decisions about investments in making infrastructure more resilient and better.

**Daniel PLEITER:** Risk is one component of what we do. It is really about vulnerability. When you take the elements of risk and you add that to, let us say for example, the built form – a house, for example – you then look at, according to that risk, why that home is now vulnerable. If it is built really strongly, it is less vulnerable to the impacts of climate change. For example, in Doveton we know that there is some really old housing stock that is not insulated well or is prone to flooding – that is more vulnerable. Once we have done that vulnerability assessment across all of our assets, be they roads or drains or buildings, we can then say, ‘Okay, we can prioritise it. We know that this is at risk, but it is more vulnerable because of that risk.’ Then we can prioritise what we actually pay attention to, because something is going to be more vulnerable than something else. Then we add over that a criticality assessment – ‘Is that at-risk, vulnerable asset critical to what we need? Is it a house or is it a seat? Is it a shed?’ – and then we can actually start to prioritise again further and say, ‘If that’s a higher priority, it’s more critical to us.’ Then we can actually look at what the adaptation option is for that particular asset.

**The CHAIR:** So criticality of the infrastructure is required in addition to the risk that is posed by disaster events?

**Daniel PLEITER:** That is correct, and then you get your shortlist, and then you can start to focus on ‘Well, how do we actually adapt that particular asset?’ and ‘What is the cost of that adaptation, the range of options?’ Then we can look at what are the economic values of those adaptation options, how they factor into health even, those sorts of issues, and then how we actually finance that particular upgrade or whatever it is, or replacement – or retreat if need be. There is a whole range of different options that you would consider.

**Helen STEEL:** I was just going to add that I guess what Dan is really talking about is a framework that we have helped develop so that you can make those assessments with different criteria that you would consider and are able to prioritise what the council is actually focused on.

**The CHAIR:** How well do we think that risk is being assessed at the moment?

**Helen STEEL:** I can leave it to my colleagues here to speak on behalf of the councils. My general view – and I have come from the private sector – is that local government, I would say, is behind in terms of the ability. I think certainly in the SECCCA experience some councils are more advanced and developed and others are not particularly well equipped to deal with risk. It is kind of really interesting. Climate change is still quite siloed in terms of council structure, and one of the things we are really trying to encourage is that you use this framework to actually consider how your whole council operates, whether it is assets and management or planning or HR or legal and compliance. It should be considered at all levels of council, but it is often siloed. I will leave it to my colleagues to speak –

**The CHAIR:** I might not put them too much on the spot and ask them how well they do it. The question is about what tools you think could help you do it better.

**Kim O'CONNOR:** Risk is that equation which is: likelihood versus the consequence. We all understand that. But there is another element that we have got to consider, which is the exposure and how many people are impacted by that risk and that likelihood of that occurring. When we get asked 'What tools?', the flood-mapping exercises that we have just recently looked at as part of our stormwater management plan development identify that Yarra Ranges has 49 catchments for stormwater. Within that there are 14 which are high density. It has a number, a series, of complaints. There are 14 that we then identify as a higher risk or with a higher need for investment, but we have got to do the modelling to then better understand what is happening. That is where the modelling comes in and helps with the analytics, looks at the hazards and enables us then to manage the infrastructure.

One of the challenges – I mentioned earlier about just roads and drainage, a very simple approach – is historically as we have stepped through our stormwater strategy elements we have found that most of the community think that a pit and a pipe will be the drainage solution, whereas what we are realising is that that is not the case. We have got to work with our community and make them better understand, working with them hand in hand, around what is happening. One of the –

**The CHAIR:** So do you think it is the complexity of the solutions, which people do not quite have an appreciation of, that are required now? What is the –

**Kim O'CONNOR:** I do not know if they have an appreciation; we may not have communicated it appropriately. We have done a very good job on bushfire preparedness, and I think there is an investment that has happened there, and people in those bushfire-prone areas understand that. But there are other events and storm events that may not actually have had that same investment or approach to the local community, so it is actually working through that. That is what we found.

Managing the risk is definitely one thing, and then there is a cost associated with that, and that is how much we can spend to then mitigate that risk. That is part of it. So there is significant investment and work that we have to do to reach a position where we can continue to move forward and feel confident that we are building back robustness and resilience.

**The CHAIR:** My time has expired. I might pass to Mr Ettershank.

**David ETTERS SHANK:** Thank you, Chair. I might pick up your comment, Ms Steel, about working with the state government and the challenges associated with that. Could you, for the committee, elaborate a little bit on what those challenges are and how you see that that might be improved in the future?

**Helen STEEL:** I think really it is from a policy development perspective. You often see that there are not necessarily cohesive policies that are being developed, particularly with planning. That would be my observation. I again leave it to my council colleagues to talk to their experience. I think there are real inconsistencies across local government and also the very simple understanding of whose responsibility it is and what areas. Again, I think that planning is probably the area where there is the opportunity to work more effectively to develop sensible policy. Just some of the examples that we could refer to – I think about Bass Coast in particular, where there is a lot of vulnerable privately-held land, particularly on coastal clifftops, which really should not be developed on. It should not. There is too much risk associated with coastal inundation. There are often cases where at a local council level they will overturn planning applications or not accept planning applications where they consider there to be risk and vulnerability for a construction planning opportunity. It will then go to VCAT, and VCAT may overturn that ruling, but it sometimes comes back to bite

the council. I think there just needs to be much more effective collaboration with that policy development so that you get consistency and understanding at both levels of government as to why those decisions are made. That is just an observation from us.

**David ETTERS HANK:** Thank you. Would anyone else like to add to that on the question of planning?

**Warren SMITH:** I think I mentioned it regarding the economies of scale. Particularly we see there are opportunities to get those economies of scale, but for instance, on Western Port and coastal planning for climate change I think an ad hoc approach, which is happening currently, probably is not the right way to go. So we are looking for that sort of statewide approach so there are consistencies and there are not those municipal boundaries for the future planning of that. So that is one example where there is an impost of cost to council and the community to work through those amendments piecemeal. I think those, like ESD – there are 29 councils, I believe, as part of CASBE, that are really advocating for statewide provisions for ESD. That is another example – Cardinia shire is currently working through that process. But we do see those economies of scale where there are common issues and it should not cross municipal boundaries where we believe that there should be more of a state approach to it rather than an individual council approach.

**David ETTERS HANK:** The climate change action plans are spread across multiple state departments, and there have been some issues raised about the nature of the interface between the state government and others and whether mainstreaming is the way to go, which is that dispersal across departments, or whether there should actually be some sort of central agency that is coordinating climate response and working with stakeholders. Could I throw that open for comment as to how you see that?

**Helen STEEL:** I would have thought an organisation like Sustainability Victoria could play a role here. There have been I think a number of different agencies that have been created by the state government to probably try to do exactly as you have outlined. I guess as the whims of government change, priorities change. I know that Sustainability Victoria is much more focused now on the circular economy. There could be the need for that sort of agency, but there are so many agencies at the moment and I just wonder about their overall effectiveness. The creation of a new one could be part of a solution. I certainly think the federal government needs to also get their act together and centralise a lot of this thinking, which I think would be helpful for everybody. But maybe I can turn to my colleague Dan. Dan has been involved in the sector for 17 years, so I am sure he has seen a lot of shift and change in that time.

**Daniel PLEITER:** Yes, I think what we need at the end of the day is certainty, clarity and consistency around what we need to do. At the moment we are all, as alliances of councils or individual councils – as you mentioned before, the framework – going about that more or less the same way, but still there is no established framework and there is no clarity, if you like, on how we then respond collectively and consistently to the community. So I think we are grappling with that at the moment – who discloses the information and where it gets disclosed. Is it in a planning amendment, or is there some other way in which information is disclosed? Ultimately we are required, once we know the information, to release it. But if we know that there may be some uncertainties in the data, then how do we actually deal with that? So I think that is where the state government has a leadership role to say that this is the framework in which you should work. And then in terms of how we actually interact with the community and disclose information, that needs to be guided so that there is that consistency. Collectively it is an all-of-government approach that is required, and we all need to be on the same page, otherwise the community will get confused and they will not understand, and then you will get inconsistencies in planning application responses and things like that. So we do need to get on the same page essentially so that we can have a coordinated approach.

**The CHAIR:** Thank you. Ms Bath.

**Melina BATH:** Thank you, Chair. Thank you very much for being here. There are so many interesting topics here. I want to pick up your point about Bass, and indeed I have been communicating with constituents in Bass on this very issue. Cowes is an established town, of course. Silverleaves is next to the town; it is a suburb of the town. There are people there – it is an established street in a township – who have applied to build a house there. The house can be built in line with the new planning – by 2100 sea levels will rise by 80 centimetres. But the egress to that house is not acceptable, and so Melbourne Water has gone to VCAT and said no. That is a very brief position on this. But it is happening again and again and again. VCAT has had a lot of traffic. The council does not need the grief, the people do not need the grief and there needs to be certainty



about mitigation but not total elimination of egress access, which could occur in 75 years. What is the role, broadly, that government needs to play to sort this out and provide a way forward to house people but also have that risk mitigation?

**Daniel PLEITER:** I think the role is to make decisions on the best available information. That may change in time, but we are required to act on what we do know. Sometimes you might get it right and sometimes you might get it wrong, but over time that will play out. So I think the role is that there needs to be leadership, and we lead with the best information that we have.

**Melina BATH:** But what does that look like on the ground? Warren, you talked about bush overlays and the importance of bushfire overlays. How can this be expanded then into the new climate change reality with coastal inundation and riverine et cetera? How does that look in practice?

**Warren SMITH:** I did use that example because it is statewide, so there are no cross-municipal boundaries in regard to that. The risks are identified. And in the individual case that you brought up – it does happen from shire to shire, depending on the community as well. As Dan said, I think it needs to be that evidence base. Things like flood risk and coastal risk need to be across the board with the state really leading that charge. And whilst I know there are efforts at the moment with Melbourne Water and the like to get that flood information and coastal hazard information, the reality is the data is getting older. As Dan said, we are relying on older data, so we need that available data to better inform our communities so that decision-makers can make those decisions and it is not going through those large processes, as you highlighted.

**Melina BATH:** Sure, and we have got, what is it, 3000 kilometres of coastline in Victoria and 100 towns and multiple millions of people living on those areas. So it is an individual case I raised, but it is a really large problem. SECCCA, one of your recommendations talks about reducing duplication and error and setting a standard, government-endorsed methodology in assessing this risk. So in that context it is about being streamlined in this. So could you speak to that recommendation further?

**Daniel PLEITER:** We have got the information, we know where our assets are, we know what the impacts of climate change are and we know what a lot of the solutions are – we just have to go through and do the hard work. There is just a lot of work that needs to be done that requires engineers. It requires climate scientists, it requires consultation with the community to assess options and then it requires decision-making. So it is just a really long, detailed and difficult process, and that is what we are trying to work on. I think the methodologies are there – it is just that they are not consistent. We have got so many consultants that can do this work really, really well, so it is a matter of engaging them, doing the hard work, looking at what your option is at the end of it and then leading with your best foot – evidence based, making decisions with the best evidence that you have.

**Melina BATH:** Thank you. Kim, you spoke about five incidents in the past 12 months. Often council staff are just busy doing that hard work of recovery and rebuilding. It is very hard to do the other work, the futureproofing work, when you are just busy dealing with the issues of storms, floods, fires or whatever.

**Kim O'CONNOR:** Yarra Ranges council has an emergency management team, so we have a team that look at emergency management. Further to that, following the significant storm event that we had in 2021, we have a dedicated officer that works through using contractors to manage both our BAU – we can then manage separate to that response. So it is actually making sure we are geared up for that approach, and we have had to invest in that. So prior to that, when we would have an event, it would almost impact our BAU; we would go and respond to that event, impacting our resources. But we have got better at managing these types of events, considering we have so –

**Melina BATH:** Do we need to know anything about that to tell government – about your resource allocation or funding or the like?

**Kim O'CONNOR:** It is how an event gets declared and then how the approach is. So the challenge we run into is that for us to seek the disaster recovery funding, both state and federal government need to declare it an event, and it needs to be significant for that to occur. I think the trigger is about a few hundred thousand dollars, so councils are then carrying that as part of the operation. So to actually have more flexibility or available funds around how we can acknowledge that and access that would be significant. Tree events – council just in its operating budget last year was \$1 million overspent on tree events, but they are not claimable in certain scenarios, so that becomes an impost. What you are touching on is something that local governments can work

with the community on to make sure that we can actually progress that. So there are different communities that are very resilient, and they will actually help us and help themselves respond to those types of events as well.

**The CHAIR:** Thanks, Ms Bath. Mr Berger.

**John BERGER:** Thank you, Chair. Thank you all for your appearance this morning. Kim, I am just interested to unpack a bit more about the flood mapping that you were talking about and your catchment areas, because it appears to me that there is only so much water a dam can hold, and it has got to go somewhere once it overflows. What are the considerations that are going to be taken into place in terms of these mapping processes?

**Kim O'CONNOR:** In terms of the mapping processes, we have got the municipality. Within the municipality there are 49 catchments, and within each catchment we then look at the density of housing – the future development being basically the concentration, so the impact on the water as well. From that we are then able to model it and look at where we can keep water in the land. That may mean that historically we have responded by fixing pits and pipes where the issue is – the localised flooding – but we are finding that we need to go upstream and look at the source and look at managing through parks, through our reserves, and how we can slow the water coming through. When we are looking at the issues or challenges of water and flooding it is the amount of flooding or the amount of water that comes through, but it is also the velocity and speed. When you actually have intense rainfall, so that 15-minute type of experience, that impacts part of our municipalities, such as the hills, differently to how it impacts the riverine area of Coldstream and Yarra Glen, so that is around holding water and managing water through that.

The flood modelling – already there is existing flood modelling from Melbourne Water, which is your LSIO modelling, so that is generally used as a planning tool. That gives you guidance around freeboard – how far your house needs to be above the flood level. But that also helps us then look at how we can manage the water in the impacted areas and communicate that to the communities so that for future building, such as what was just raised with Cowes, you can then look at how we are going to future build and if developers are meeting our objectives. There is this piece where we look at if the objectives are being met, and then sometimes we get stuck in what the design is, what the local issue is, you know what I mean? So your local issue was access from Melbourne Water, but are they achieving the overall planning objectives? It is balancing that out as well. The flood mapping will go a long way to assisting in that but especially to how we spend our money as well.

**John BERGER:** Given that you have got 49 catchment areas, how old is the information that you are relying on now for future building?

**Kim O'CONNOR:** It is current.

**John BERGER:** It is current.

**Kim O'CONNOR:** We just completed a housing strategy, which was endorsed by council earlier this year. That information, using our consultants, has been able to be plugged into our modelling, and that has given us some really strong information around those higher priority areas. But when we are looking at the higher priority areas we have got to be mindful that we cannot ignore the rural areas and other areas that are impacted as well. We have got to look at balancing it across the whole municipality as well, so although we have got 49 areas of catchment, we have also got to look at the different areas of the municipality, which is effectively Upper Yarra, the valley, the urban area and the hills. We have got to balance all of that at the same time, and that is where the complexity comes into the submission.

**John BERGER:** Thanks, Chair.

**The CHAIR:** No worries. Thank you, Mr Berger. Ms Lovell.

**Wendy LOVELL:** Yes, I will probably address mine to the South East Councils Climate Change Alliance. My question is around the government housing targets and the significant numbers that you have been asked to increase in the south-east: the City of Casey, an extra 104,000 properties, so around 80 per cent; Dandenong, a 96 per cent increase; Kingston, 85 per cent. Most of the councils are around 80 per cent increases. This will obviously increase the concreting of vast areas of land but also the heat island effect of urban development. I am wondering what work is being done to address the complications that that will create for climate change in

this area and also if there is any work going on around significant shade tree planting and the type of development that is going in in these areas. Because in the City of Casey, with the amount of development that goes on down there, you get these 400-square metre blocks or smaller, where they build on every inch of the block of land. There are no backyards, there are no green lawns, there are no shady trees, there is nowhere for kids to play et cetera, and that all adds to that heat effect as well.

**Helen STEEL:** Well, thank you for acknowledging that, yes, if we keep building things, we are just making our problem even more challenging with regard to climate change. Look, I think you have also got to recognise that we are an alliance of councils. We do not necessarily have all the council individual data, and councils only have the ability from a planning perspective to regulate on certain aspects of that. We need, certainly from the federal government and from construction, for regulations to be changed in alignment with other decisions that councils are making. But I think that –

**Wendy LOVELL:** The federal government do not do planning.

**Helen STEEL:** No, the federal government does not do planning, but the state government certainly does. Some of the construction decisions and regulations are made outside of local government as well in terms of what can be constructed and how, and we would love to see different changes to just the methodologies used in construction materials and how buildings and homes are constructed. Certainly I would suggest that most of our councils are thinking about the implications of those new requirements and the huge challenges associated with doing that. I think there is a big focus on infill development as opposed to greenfield, which many of our councils do not have the ability to do. Again, I think it is just going to have to come down to, from a planning perspective, them making decisions around the different applications on their own merit and what the construction companies are actually suggesting. Dan, maybe you want to add –

**Wendy LOVELL:** Obviously the infill developments often involve building on backyards where the shade trees actually are at the moment.

**Helen STEEL:** They do. I think just generally speaking there is more understanding of the need for tree shade and for eliminating heat islands, but it is just going to take a long time and a lot of money and effort to change some of that. We also know the impacts of that on health and wellbeing, and I think that that is not often addressed in these conversations. But Dan, maybe you want to talk about enhancing community resilience and some of the other work you do.

**Daniel PLEITER:** Yes, sure. Just in terms of the built form, we know we need to house people, so that is a given fact. We need to do that. When it comes to the actual ‘What are you building?’ we know that we need to go even further. As Helen is alluding to, the National Construction Code essentially controls that, but still it is not really aiming at building net zero, efficient homes. Even from the state government’s perspective, we do not have policies there that are actually looking to electrify all of our homes. If that is the performance goal that we are after, then that is what we need to aim for. We know that it is possible. We have the technology. It is affordable. It has really good, strong paybacks. As a community, if that is what we need to aspire to, then that is what we need to work towards and legislate and mandate so that there is clear certainty within the market and clear certainty for builders that that is the standard that we now need to apply. We do it for everything else. We do it for electrical. We do it for engineering. We just need to get on with it, essentially, because we know that we have to do a lot more building. If we build it in at the start, then it is going to be resilient and it is going to be energy efficient for the life of the actual project. But so often we are so far behind; we are decades behind in this. We have got the technology. We know it works. It improves health, it improves the budget of people’s households and energy efficiency reduces carbon. There are so many wins in it, and yet still we are not taking it seriously. So if we have got all of these housing targets, let us meet them, but let us do it in a way that is net zero, is not going to contribute to the climate problem and is actually going to build homes that are great to live in.

**Helen STEEL:** And interestingly, if I can just add this, our focus has been on hard assets and infrastructure, and in the climate change conversation, biodiversity has not necessarily been in our remit. But more recently, as we realise the connections between all of these things and think a bit more holistically, we are bringing biodiversity into our conversation and helping, I guess, councils sort of speed up their thinking around how they approach that.

**Daniel PLEITER:** Can I just add one point to link these two conversations: the point about flooding: Melbourne Water is working on flood depth data, which is one of the biggest pieces of missing information that we have. On the basis of that we can then work out proper damage–cost curves for how a home might be impacted by flood. Then we can really see who is highly vulnerable, and we can start to make some adaptation options there as well. The work is happening, and it is critical for our councils to get across that and for state government to assist.

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

**Jacinta ERMACORA:** Thank you very much. There has been quite a bit of discussion about how we build or how we set rules that stop people being impacted by climate disaster. I want to flick to the other way. I am interested in the councils and the peak body there and your views on how to best capture community voices in planning for climate resilience. I am interested in a structured approach – someone mentioned a framework – but also the human side of it and the relational side of it at the local level.

**Helen STEEL:** I can kick off. Yes, it is a big challenge for councils: how do you have effective communication with the community and bring them on the journey? SECCCA embarked on a piece of work that was actually funded by the Minderoo Foundation to look at how we enhance community resilience – really extending that conversation and connecting it to the community. We looked at a number of particularly vulnerable communities. We are aware that many of the middle-class are able to upgrade, put solar panels on their roofs and have insulation in their homes, but there is quite a large sector of the community who are unable to do that or who are renting homes that are substandard and other elements of that. But I think through the work we did with what we called our enhancing community resilience program we identified 17 subsectors that were really vulnerably affected – everything from single parents raising children to elderly community members who rely on medicines – and we really worked with them to hear from them as to what the impacts are. You talk about climate emergency events, but climate change is impacting everything. Just driving here today I was delayed because a tree fell in Mornington Peninsula. These things are happening now as a daily occurrence.

But we were able to speak to some of those subsectors of the community and ask them what their major concerns are and then ask them to help co-design effective communication tools that would enable that sector of the community to get more information and knowledge about what was going on. There were two subsectors of the community that we identified. One was the elderly. We worked with a couple of aged care communities to develop information on where they can go during heat events. There are a lot of council assets that have air conditioning or other areas that are safe for them to go to, so we co-designed this with them. They wanted a print format because many of them do not use digital, have digital access or use data online, so we created pamphlets so that they could access information as to where they could go in those heat events. We also worked with high school students on creating TikTok videos so that they could talk to their peers about risks associated with climate change and share stories and exchange ideas on how they could support each other. There is a lot of thinking around how we engage community, and maybe my council colleagues could talk to their individual projects as well.

**Warren SMITH:** Yes, for sure. Just building on that – and we do not have to look too far for an example – the Worrell Reserve here in Emerald is part of the energy resilience project that was formulated by the Victorian government, but it has genuinely been a partnership approach between the community groups that operate and manage those facilities with council and external providers to really provide that resilience for that community centre, as an example. There is battery power backup and there is also diesel generation backup, so when there are events that are quite significant, that are really impacting and hurting these communities, there is that place to go.

**The CHAIR:** Sorry, how is this centre funded?

**Warren SMITH:** It was funded through the energy resilience project – a Victorian government energy resilience system program. That is a relatively recent one, but again it provides that outlet for the community to go to to simply charge their mobile phones in a disaster event, which we have seen in more recent times. To pick up your point, the community is asking for these types of initiatives, and we have seen that in Cardinia shire more and more – microgrids and battery power back-up and ‘Where do I go for an emergency?’ I think

council obviously does have a great role in that, working with state and federal government agencies to really enable that for our communities for when these events do occur.

**The CHAIR:** Great. Thanks. Ms Broad.

**Gaelle BROAD:** Thank you very much. Thank you for your contribution today. I guess I feel like I am on *The Voice* – I am hoping for four yeses. I am just very interested in your thoughts on disaster recovery funding arrangements. Victoria is quite different to other states in that it does not permit betterment. I guess, with your understanding of the process, would you like to see that incorporated so you can build back better when you apply for funding under those arrangements? What are your thoughts or experiences?

**Kim O'CONNOR:** The answer is yes.

**Gaelle BROAD:** That is one yes – okay, another yes.

**Kim O'CONNOR:** The answer is yes, but, look, we have had some prime examples where we have had unsealed roads that have washed out. We have invested in building back, and then for additional funds we are able to put a light seal over that road, especially on steep roads, and that helps actually build it back better and then improves the drainage. It does not necessarily need a lot more funds to do it, but it is just the approach and making sure that then there is a consistent way to build back better. There is definitely a benefit to having those available funds and how we then look at doing it differently or creatively as well when we build back. As you drive up here or as you drive the roads, I think you will see that where we interface our unsealed roads with a department of transport road, you will see that washouts occur. You will get gravel on the road just in those simple locations where there could be a build-back opportunity in just improving the asphalt aprons on those types of roads as well and investing in that.

**Gaelle BROAD:** Did you have anything to add?

**Warren SMITH:** Yes. Building back better is definitely encouraged, particularly when the communities are impacted, and we are seeing those live assets being damaged and where they do need to be replaced. I think more and more that resilience for the long term does require that investment, so that would be definitely encouraged.

**Gaelle BROAD:** I am interested – we sort of touched on this a bit earlier: there seems to be a lot more funding that does go towards the response and recovery and not so much sort of mitigation works. Can you talk to that? Do you support any change to that sort of balance at the moment? What are your thoughts?

**Helen STEEL:** My thought on building back better is that you just need to incorporate innovation into what is being built back and make sure that there is resilience in considerations of what you are replacing roads and drainage systems and things with, so that we can focus on that resilience. It is always challenging, because if we actually get the resilience and mitigation right then you will see less need for funds in emergency management – I mean, that is what you would hope. But it is a very hard thing for councillors and anybody in these roles to actually get their head around. It seems to not be as tangible, which is why a lot of moneys end up going to emergency response as opposed to mitigation – because it is much more tangible. Having said that, also, we have got a number of councils that are just constantly dealing with emergency situations, so for them to have the headspace to even think about incorporating resilience and mitigation into their work is hard for them as well because they are just constantly in response mode. Dan, do you want to add –

**Daniel PLEITER:** Yes, just to say that it is absolutely essential. I think we just need to get to a point where we understand and recognise it is going to cost us a lot of money to do this. It may well be an extra 10 per cent, 5 per cent or it could even be 100 per cent on top of your budget when something is destroyed to replace it with something that is going to withstand the next storm event or whatever it could be. I mean, the same thing we have seen with fire – we know that adds an extra 10 per cent or 20 per cent to the cost of your build. We just have to accept that. We need to ensure that if we are going to build something back we do it in a way that is going to withstand the next event so that we do not have to build it again. Otherwise it is just a bandaid approach.

**Gaelle BROAD:** Now, you talked about knowing what the solutions are, and I guess it can be overwhelming when you think about the improvements that need to be made to roads and housing. What are the most cost-effective practical solutions? What are the priorities?

**Kim O'CONNOR:** Well, firstly, I think it gets back to engaging with the community and making sure that we are engaged with the community. I think you will find later today Monbulk will be talking as well, but it is around making sure that we have local community and doing that pre-planning and investment very early. Then, once we do that, it is around looking at different or more creative ways – water, keeping the land, looking at, as I said earlier, how we can treat that, the bushfire elements around what we need to build in there. I think we need to do that investment into local community and understanding that preparedness and engagement very early.

**Daniel PLEITER:** All the data that we spoke about for the built form, we apply the same approach to some populations, and then we can find out exactly who is vulnerable in our communities. It would be presumptuous of us to say these are the best solutions until we have spoken to the community. Helen alluded to the co-design process that we went through. The outcome of that actually surprised us because it was not what I would have thought we would have done. So I think in terms of where we lead on this, we need to have a real good co-design approach to community involvement to understand what the best solutions actually are for them.

**The CHAIR:** Thank you so much, all of you. Our time for this session has concluded. Thanks so much for coming along today and for the evidence you have given to the committee. You will all receive a copy of the transcript of the evidence from today for you to review in the next week or so before we publish it on our website. With that the committee will take a short break to reset for the next witness.

#### **Witnesses**

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