T R A N S C R I P T

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Climate Resilience

Wangaratta – Wednesday 4 December 2024

MEMBERS

Ryan Batchelor – Chair
David Ettershank – Deputy Chair
Melina Bath
Gaelle Broad
Jacinta Ermacora
Wendy Lovell
Sarah Mansfield
Rikkie-Lee Tyrrell
Sheena Watt

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John Berger
Ann-Marie Hermans
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Rachel Payne
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Richard Welch

WITNESSES

Carl Walters, Interim Chief Executive Officer, and

Joel Leister, Manager, FloodPlain Implementation, Goulburn Broken Catchment Management Authority.

The CHAIR: Welcome back to the Legislative Council Environment and Planning Committee's Inquiry into Climate Resilience in Victoria, coming to you from Wangaratta. Welcome to the representatives of the Goulburn Broken Catchment Management Authority.

All the 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 you provide to us today is protected by law. You are protected against any action for what you say during the hearings, but if you go elsewhere and repeat those 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 tell from the microphones, all the evidence is being recorded. You will be provided with a proof version of the transcript following the hearings, and those transcripts will ultimately be made public and posted on the committee's website.

Welcome. My name is Ryan Batchelor. I am the Chair of this committee and a Member for the Southern Metropolitan Region in the Legislative Council. I will ask the committee members to introduce themselves.

Gaelle BROAD: Hi. I am Gaelle Broad, Member for Northern Victoria.

Wendy LOVELL: Wendy Lovell, Member for Northern Victoria.

Rikkie-Lee TYRRELL: Rikkie-Lee Tyrrell, Member for Northern Victoria.

Sarah MANSFIELD: Sarah Mansfield, Member for Western Victoria.

The CHAIR: And online we have –

Jacinta ERMACORA: Jacinta Ermacora here from Warrnambool, Member for Western Victoria Region.

David ETTERSHANK: And David Ettershank, Western Metropolitan Region in Melbourne.

The CHAIR: Gentlemen, if you could for the Hansard record state your name and the organisation you are appearing on behalf of, then I will invite you to make an opening statement.

Carl WALTERS: Okay. No worries. Thank you. My name is Carl Walters. I work for Goulburn Broken CMA.

Joel LEISTER: And Joel Leister, Goulburn Broken CMA.

The CHAIR: Over to you.

Carl WALTERS: Thank you. Thanks for the opportunity to have a chat today. I have got a brief written statement that I will read through. Those who know me would say I am not used to reading statements; I usually talk off the cuff.

Thanks for the opportunity to have a chat today about the issues in our region. My name is Carl Walters. I am Interim CEO of Goulburn Broken CMA and have been for a few months now. I have worked in the NRM space in the Goulburn Broken more than 40 years, both at GMW and the CMA. I have got with me today Joel Leister, who is our floodplain Manager, who is also very experienced at managing the challenges around water.

I will start by acknowledging the Yorta Yorta people, the traditional owners of the land we are on today, and pay my respects to their elders past, present and emerging.

The CMA has been at the forefront of addressing many challenges posed by climate change, ensuring sustainability and resilience around natural resources and communities for a number of years. Our region stretches from the outskirts of Melbourne to the south of the Murray River in the north. Our catchment includes Lake Eildon, our major water storage. We have got eight municipalities – we touch on a few others, but eight main ones: Benalla, Shepparton, Campaspe, Mansfield, Mitchell, Moira, Strathbogie and Murrindindi. And we are on the lands of the Yorta Yorta and Taungurung.

Our staff – we have got 60 people who work for us. They are also part of our broader community, and we really build on that interconnectedness with the community and our staff.

Our region prides itself on being the food bowl of Victoria, or Australia if you like. However, the impacts of climate change are already evident, with increased frequency of intense weather events, altered rainfall patterns and rising temperatures, and these changes pose significant threats to our biodiversity, water resources, agriculture and community.

We acknowledge the committee's focus today might be primarily on built environment and infrastructure. However, within our catchment the climate-related events that impact our communities are aligned with the natural environment, and we work quite hard at trying to build those two things together. As such resolving issues arising within the built environment also means understanding and considering these effects and influence from the natural environment.

We have adapted an integrated approach to climate resilience, as outlined in our climate change integration strategy. Our strategy emphasises the importance of adaptation, mitigation and community engagement. Adaptation, delivering management options and supporting biodiverse water health and sustainable land use are key components of our strategy.

Floodplain management is also a critical component of our climate resilience strategy. Our regional floodplain management strategy, which finishes in 2028, aims to build flood-resilient communities by capturing and sharing flood knowledge to ensure future developments are not unduly exposed to flood hazards. I just want to acknowledge that the 2022 spring floods had a significant impact on our communities, on our landscapes and on our environment, and it was obvious that the newer areas of development in our landscape around the township such as Shepparton and Kialla were clearly more resilient to the impacts of these events than the older areas. A key focus is for us to continue to provide flood intelligence information to the region to assist the community agencies to support flood resilience and help residents and developers make informed decisions around risks around flooding in particular.

We acknowledge that the council has taken the lead in managing growth areas and the planning scheme requirements as part of the structure precinct planning process they go through under the Victorian planning provisions. One area of interest for us is the urban levees and the protections that these provide to those key vulnerable areas in ensuring this infrastructure is well understood, well maintained and well managed. In terms of the planning schemes, we support the climate science as applied to land use planning and development decision-making, and flood overlays and zone controls include consideration for climate change. Currently, there is not a standard approach across the state from floodplain management authorities in Victoria. What is the scenario we should be planning for? We have supported similar recommendations provided by other CMAs that there is a need for a consistent statewide approach incorporating the best available flood and inundation information in the planning schemes and incorporating the natural environment into these decisions.

In summary, the CMA's efforts in climate resilience are well demonstrated, and we are keen to continue to support building a more climate-resilient Victoria. We are also absolutely committed to having our built environments better planned through consistent statutory land use planning for new developments and to manage the legacy of flood-affected areas through a mix of structural mitigation, total flood warning systems and emergency management. Helping those affected to clearly understand their risks is our priority. Thanks.

The CHAIR: Thank you very much. I might kick off. What do you think are the biggest changes you are seeing in the waterways that you are managing from our climate changing? What are the biggest changes you are seeing?

Carl WALTERS: From my perspective?

The CHAIR: Yes.

Carl WALTERS: I think we have got more extreme events, which are surprising people, and we have also got more pressure on our waterways and our systems from amenity use. People want to be closer to the water and seem to want to be around water. But I think extreme events from a climate change perspective are clearly growing and the regularity of those is probably quite concerning. Joel might have more than me on that, but that is my vibe.

The CHAIR: Yes. In light of those changes, obviously as an organisation you would be doing your own risk assessment and risk management practices to adapt. What do you think have been the most successful changes that you have made to the way that your CMA is operating to deal with those risks? I am trying to get a sense of what you have been doing well so that we can amplify that.

Carl WALTERS: I think our reviews around our major centres have stood us in good stead for the future. We have been looking at continuing to upgrade our flood reviews around those towns, and I think we have got something like 13 on the go at the moment. We are just trying to build that better information and then communicate that to our broader communities. I can say hand on heart that I think we have got one of the best flood information portals available in Victoria within the urban centres. You can put in your property address and you can get a report that says what your risk is, and I think that is probably one of the big value-adds that we have provided in our region.

The CHAIR: You mentioned amenity earlier – people like living near water for a whole lot of very obvious benefits. How is the community that lives near water responding to the increased risk that is clearly coming their way, and what more do you think that we collectively can do to help better prepare those residents for the future?

Carl WALTERS: There are a few things in there. Jump in, Joel, if you like, but I will start.

Joel LEISTER: I am happy for you to have the lead, Carl.

Carl WALTERS: In the end I think for those communities their ability to understand the change in risk is really important. It depends on communities. In communities around, say, Shepparton as an example, I think the people that are close to the system understand the risk – and where you provide great information to help them understand. There are areas of Seymour, for example, where the 2022 floods were a bit of a shock to some people. It was an awful event, but in the end their understanding of what the risk is for them probably was not to the degree it could have been or should have been simply because of time more than anything. There are other communities where we are seeing a change in demographics. So the answer is: it depends on the community. But I think, from our perspective, helping them understand the risk and the changing risk is really important, and that is through things like our information portal but also a consistent language around what is coming and what is changing and being able to map those risk areas so people can see clearly where that is not. So we do pretty well around urban centres, not so much around the rural areas. That is the game.

The CHAIR: Would you say that organisations, governments and local authorities have an obligation to inform people of the changing nature of that risk?

Carl WALTERS: From a fire-prone perspective, I think that is the role – and clearly or directly in plain English or in a way that the community, wherever they sit and whatever their backgrounds are, can understand. We have a diverse community, if you like – that will do – but their ability to understand the risks as new people come is a bit challenging, so that clarity is important.

The CHAIR: Okay. Ms Lovell.

Wendy LOVELL: Guys, thanks very much for coming in today. What do you think are the big issues that are coming our way? You said we are really prepared for it in Shepparton. But what can we be doing and what can the state government be doing to provide better infrastructure and better preparedness for our communities?

Carl WALTERS: You can talk; I will stop.

Joel LEISTER: There are probably two elements there. We are talking about infrastructure. I think the Shepparton experience showed us transport links are key, and when you have major centres cut off, that is a

massive change for not only the local community but also the wider area of the state. Wendy, you would know that well and truly through the Shepparton experience – when you had Mooroopna cut from Shepparton you had big businesses who were cut off from their workforces. That is a major issue. Addressing that is a big challenge too. In the middle of a floodplain building big pieces of infrastructure will also affect the floodplain. That needs to be done in an appropriate way.

I think the other side of that, moving away from the built environment, is making sure that our planning is up to scratch, so when we are putting in new industrial estates or new residential estates they are in appropriate locations, they have got the right levels of access, people can get in and out – even access to emergency services and things like that. We had the example in Yea earlier this year where the community of Yea was cut off because of water over the three main access roads, but within that there was a new development that was cut off from the main town, so you had a situation where you had communities isolated from a community which was isolated from the rest of the state. Trying to avoid that sort of circumstance is important. That is where the planning needs to be kept up to date regularly, and it is a constant challenge to keep those planning schemes up to date. We are working through a process now with all our councils to try and get some of this backlog through with the program the state has put in, but it is still a prolonged process. We would like to see that accelerate quicker, and we are trying to work with our councils to do that as best as possible.

Wendy LOVELL: Thank you. Anything from you, Carl?

Carl WALTERS: I think that Joel has hit it on the head. I think that interconnectedness of the community is really important – and we all experience it in extreme events. Even last week there was a surprising amount of heavy rain in different places, and if you do not have the infrastructure, then really, how do you manage that? So it is that criticality. The 2022 floods – Shepp and Mooroopna were isolated but Tatura was isolated from there, and there were broader communities that could not go anywhere for weeks. How do you deal with that? It was a massive cost to Victoria.

Wendy LOVELL: Everyone on the western side was cut off from the hospital, but also a major freight route for the state was completely cut off.

Joel LEISTER: Yes. As you know, you could not get from one side of the Goulburn to the other between the Hume Highway and the Murray River. All the access was all cut, so that is a big split in the state, let alone the local region.

Wendy LOVELL: The impacts on our rivers of climate change but also the impact of government policy regarding water going further down the river to Victoria and South Australia – as the managers of the Goulburn, what is the impact that is having on our river system?

Carl WALTERS: That is pretty well described, but in the end using our Goulburn River – I will get off my big hobbyhorse – as a channel to transfer water further downstream, there is the absolute priority of how we raise that and make sure we do not go back 10 years to where we were, which is passing more water than we naturally should at the time of year it should not naturally have it, so the erosion impact of that on our river is quite significant. That artificial operation of the river without the rivers' best interests at heart is a really important issue we want to deal with.

From a larger event perspective, if we do not manage our Goulburn River to protect its batters and make sure vegetation is in and is quite stable and then we get an extreme event, the erosion impact of that and that high-velocity water can be quite significant. It actually can have multiple effects. So our role is to manage the health of the Goulburn and its streams as well as we can and keep those batters as stable as we can, recognising that rivers move. But the artificial use of that for other purposes then can erode that if we do not get that right, and at the moment we are on record a couple of months ago as making it clear that, yes, we think that is clearly at risk as more water transfers to other parts of the Murray system. I am happy to talk about that ad nauseam.

Wendy LOVELL: Thank you.

The CHAIR: Time has beaten us. Dr Mansfield.

Sarah MANSFIELD: Thank you. I am interested in the comments you made in your opening remarks about the newer areas of Shepparton being more resilient than the older ones. I am wondering if you can

unpack that a bit and explain what you think is behind that or we can learn from it, particularly given the focus of this inquiry.

Carl WALTERS: Happy for you, if you like –

Joel LEISTER: I can do that one. A really good example is the Kialla estates, which are essentially south of Shepparton. It is one of the growth areas of Shepparton. It is a newer area, so they are obviously being built at the moment and have been over the last probably five to 10 years – there or thereabouts. The standard of construction has changed in terms of the minor and major drainage systems, making sure they are all elevated above the one-in-100 flood level. In terms of flood levels that they have been allowing for as part of the planning process, we have actually been including climate change in there to give that added freeboard.

What we found was during that spring 2022 flood in all those areas there was not a single house in the area flooded above floor level. Yes, there were roads inundated, but that is as per the design. So that community actually escaped that flood relatively well, putting aside the fact that probably some of the main businesses were still impacted and there was still that broader community impact. But locally, those people in those estates were okay.

If you compare that to the older stock of Shepparton, so the 1950s through to the 1970s stock, which is a bit closer to the Goulburn and set at a lower level, a lot of those were the houses that were directly impacted by flooding above floor. So you can see a shift – as we have got better standards, better designs, better processes and policy, we have been able to mitigate that risk and manage it better. Now the core focus for us is how we deal with the risk that still sits with those old areas.

Sarah MANSFIELD: And what sorts of things are you doing to address that risk?

Joel LEISTER: The key one is making sure that future planning is in the right spots. There are obviously new structure plans happening in Shepparton now – making sure they are in the appropriate location on the floodplain. I certainly take on, though, that there are some comments in other inquiries at the Commonwealth level about how we should stop developing the floodplains. That is a real challenge for a place like Shepparton, because if you do not develop the floodplain you basically have no development. So it is about managing the risk, and our current guidelines say that areas that should flood quite safely in terms of shallow depths and small velocities are appropriate to be developed.

There is probably a broader question going forward as to: in a changing climate is that still appropriate? That is a question for government policy, but at the moment that is allowed. So it is about trying to put development where it is safe and where it is appropriate, as opposed to intensifying areas in which we probably in hindsight should never have built. Seymour is a classic example of that. If you look at Seymour, the areas west of the railway line probably should never have been settled or built on; the area east of the railway line is high and relatively dry. So it is about making sure we put development in the right spots, which is commensurate to the risk.

Sarah MANSFIELD: You also referenced nature-based solutions. I know we have heard from other CMAs, but I would just be interested in what you have done in that space and what you have learned from it and again what we could learn from that.

Carl WALTERS: I suppose part of why we put that in there was what we have had a long history of doing is a drainage program in the irrigated landscape in particular. The drainage program was about building drains. Where we have shifted that to is restoring natural flows through natural depressions by removing man-made obstructions more than anything. It is massively cheaper, but it is also massively defensible. So utilising nature to allow water to go where it naturally should, no-one can really argue against that – except if you have got your own beef. But it also allows an opportunity for nature to recover in those lower areas, so you will get restored vegetation, biodiversity et cetera. So there is a roll-on effect of simply restoring natural flow paths. In our catchment we do not build drains anymore. We actually build what we call hybrid drains, which is about restoration of natural flow. It is just trying to really protect those natural flow paths from artificial obstruction but also artificial development. When Joel's team provides a response to those developer inquiries in those broader landscapes, they are really looking at what is naturally there and how they can protect that first. Then you have a discussion with a developer about, 'Well, maybe we can move that a little bit,' but your starting point is what is naturally there and then how you build that into your process. So it is similar process, just

utilising nature much, much more, which is part of that thing you flagged before, overseas, looking at buying back all these areas and restoring natural rivers and things like that. It is sort of our version of getting ahead of that, if you like.

Sarah MANSFIELD: Okay. Thank you.

The CHAIR: Ms Broad.

Gaelle BROAD: Thank you very much for being here today. I am just interested more broadly: what tools CMAs have to build climate resilience?

Carl WALTERS: From a flood perspective or more broadly?

Gaelle BROAD: More broadly, unless you feel that you are kind of restricted to just that.

Carl WALTERS: There are two things. We have different tools about climate change impact on the broader areas – so agriculture, nature et cetera – and they get better all the time. We did work a few years ago now looking at: 'Here's our landscape; in a climate change scenario this area is more vulnerable than that area because of its circumstance.' Some of that is access to water, but some of it is also what system they are in and all that. So there are those landscape change tools that are in place, and they are modernised quite regularly. But from a floodplain perspective, which is probably vital to this, you are trying to model for a changing world. Joel would probably explain it better than me.

Joel LEISTER: In the floodplain space it is fairly well defined. We work to scenarios of what a temperature rise might be over a timeframe, that corresponds to a rainfall increase and we essentially model the change. There is a lot of uncertainty for us, particularly in terms of what Eildon will look like in a future climate and how full is it likely to be – is it likely to be full most of the time or empty? – and Nillahcootie to a lesser degree. We know we are going to have a drier climate, so our losses when rain happens – we are not going to have as much run-off. We are already seeing now that when we do get rain events they are significant rain events and more intense. There has been some research – it was in the latest science report for the state government – that has demonstrated that those extreme rainfall events are actually increasing. Whilst we are seeing less rainfall overall, from a flood point of view, they are getting more intense and therefore likely to lead to more flash flooding and then riverine flooding as well.

Carl WALTERS: We try and model it. I suppose the example we are in right now is we have had three rainfall events over the last two weeks. We only need not a large rainfall event now on top of all that to see some change. It is not just massive rainfall, it is actually regularity; it might happen in peaks and troughs. Trying to model that is very different, which is what these guys do really well.

Gaelle BROAD: Yes. You are doing the modelling and the reviews and studies, that sort of thing, but with the mitigation works that you are managing, what are some of those works that you are working on?

Joel LEISTER: The main one that is being built at the moment is the Numurkah town levee; that is going in. That was obviously a project that came out after the 2012 flood event up in Numurkah. Unfortunately, mitigation projects do take a bit of time to get on the ground from when the community identifies one through to actually starting the construction. That will be protecting the town from that 2012-type event, which is notionally a one-in-100. One of the concerns that we have looking forward to the future climate is that what we now know are one-in-100 flood events, which is what we would build levees to, may not necessarily be one-in-100 in 70 years time. It is about understanding and constantly redoing some of those studies to make sure that the level of protection is what we expect it to be and what we think it might be.

Carl made mention before that we have got levees down in Euroa, for example, and also Nathalia and Cobram, which are more those urban levees. So it is making sure we are redoing those studies at a semi-regular interval to understand how the climate has changed in the guise of 'What is the level of protection offered?' If we still think it is one-in-100 level of protection and it is not, it means there is a community at risk that we do not fully understand. We need to make sure that the planning controls back that up as well, so that is where we have that focus around mitigation. If we are doing mitigation right now, like the Numurkah levee, they are built to a one-in-100 with an allowance for climate change. It is just those older ones where we did not have climate change back when we were building those mitigations – or we did have climate change, but we were not directly

allowing for it. But all future stuff is accounting for climate change, so we do have that level of protection. It really is an extra freeboard on top of the levee, so rather than saying 300, you might have 600.

We are a little bit lucky in our catchment because we have wide, flat floodplains, especially in the northern part. Adding that little bit of climate change allowance does not actually change the flood levels significantly. It might only add sort of 100, 150 mil, so it is a manageable increase. Where you are up in the valleys in the higher country, that change can actually be quite significant, and it is more of an issue how you manage that.

Gaelle BROAD: I think, Carl, you said earlier about levees, making sure they are well understood, well maintained and well managed. Is there a regular inspection program for levees, and who maintains them?

Carl WALTERS: You would hope so. The owner is responsible. The owner is sometimes disputable a little bit. In our case most of the ones we worry about are owned by local government, but you rely on them to look after their assets. From our perspective, understanding how high they are and what the impact of that is is quite important. As Joel said, knowing the level around Euroa means we can clearly explain: 'In this event it's okay. In this event, yes, you're in trouble.' That communication is important for us, but in making sure they are looked after, it is really the owner of the asset, which in most case is either the local government or unknown – or Goulburn–Murray Water.

The CHAIR: Thank you. Ms Ermacora.

Jacinta ERMACORA: Thanks very much for being here today. I want to move off the flooding. There was a small reference that you made about environmental or landscape restoration, which I know is an important part of your work as well. Particularly with the Murray and those tributaries to the Murray, there is a really interesting reversal of the ecosystem dynamic because the natural period for flooding is also a breeding event for cod, but that has been shifted to perhaps the summer, when there is high demand for water, and that then reduces. I am aware of a project from a while ago at the Wonga Wetlands which was trying to reintroduce the old flooding regime and help the river red gums and then also cod breeding. It was almost a demonstration, I think. Do you have other projects that are trying to achieve those goals whilst at the same time keeping communities safe as best as possible?

Carl WALTERS: Yes, so we deliver environmental water – water that is only for the environment – either by the VEWH – the state – or the CEWH, which is the federal government, and then there is a little bit owned by Living Murray. So we try and deliver environmental water to meet the demands of the biodiversity within our waterways and also the adjacent areas. We do wetlands as well as rivers and streams where we can. We cannot do it everywhere – it is not the solution for everyone – but the way we try and deliver that depends on the target, if you like. Sometimes the target is breeding events like yellowbelly in the lower Goulburn or Murray cod in the lower Broken Creek and those sorts of things. We do try to mimic as much as we can that need, and then you get kiboshed by a flood that comes through. But in the end, you cannot control nature, you can only try and work with it. So we try and match that up as well as we can. I think we do it pretty well.

Goulburn Broken managed, on behalf of the environmental water holders, about 670 gigalitres of water last year. That is 72 per cent of the state. So everyone else talks about environmental water management; we have actually got to do it. Some of the other CMAs talk about 3 gigalitres and we have got a plan for 670. How we use that is really important. That is not for downstream purposes. We do try and mimic nature as much as we can. We do not always get it right because nature rolls over the top of you, and that is the issue with climate change driven, more extreme events. You plan for a spring event, but you do not always get it right. But we do have a really good cancellation policy. If the forecast is really heavy, we say 'Let's just put it off a little bit and see what happens.' Then we might, firstly, save a bit of water but also not create an adverse outcome. So we do try really hard on that. Our streamflow management plans are done annually, but we review them all the time to make sure that it is still apparent. We plan for vegetation, we plan for biodiversity and all sorts of different species in different streams, so it is a really complex process. But I would say that we have the more complicated area in the whole basin, if you like.

Jacinta ERMACORA: Yes. I think that is very interesting. There used to be a figure: about 70 per cent of consumption of water in Victoria is for agriculture. I do not know if that is still correct.

Carl WALTERS: It has gone down a bit. There is still a fair portion of water used for agriculture. Goulburn–Murray Water, in the GMID if you like, which is the irrigated landscape, used last year about

1400 gigalitres and last year the environment in that area used about 670, so that is about the number, but that changes each year. It depends on how much it rains and how much is in storage.

Jacinta ERMACORA: Yes. Thank you.

The CHAIR: Thank you. Mrs Tyrrell.

Rikkie-Lee TYRRELL: Thank you, Chair. Is there any damage to infrastructure from the 2022 flood events still in need of repair or under review currently?

Joel LEISTER: Yes, there would be. As the CMA, we do not have any assets, so I suppose we can only make that comment as members of the community in terms of what we see around the traps. Obviously councils and Goulburn–Murray Water as the owners or VicRoads or DTP would be in a better position. But we certainly know from driving around the catchment. An obvious example for us up in the upper catchment is the Breakaway Bridge. It is still disconnected from the road. There are obviously examples of potholes and stuff all through the catchment. So yes, there is, but I suppose we do not have that oversight to give you a full record of what is around, because we do not have those assets on our books and we do not have to worry about them, thankfully.

Rikkie-Lee TYRRELL: That is all right, because that will flow into the next question.

Joel LEISTER: Yes.

Carl WALTERS: We are able to apply for flood recovery funding, though, which is about repairing assets and supporting the community to recover so we have programs. We have a river health program which is fixing Avenel, as an example. In 2022 they basically ended up with I do not know how much sand right across their landscape and the river was eroded significantly. So there is a program there. We put in for funding and then we can do works on our rivers and streams. We also put in for funding in the irrigated landscape to help Goulburn Murray Water fix some of those assets that might not have been able to be fixed without their ratepayers paying for it. There is a program that we look after that helps recover, so we might not own assets but we help fix assets and fix nature.

Rikkie-Lee TYRRELL: So it is a lengthy process, definitely. Thank you. What barriers are hindering your improvements towards our resilience in major weather events? It is not that hard a question.

Carl WALTERS: If there is one thing that the state could do that might make our life a bit easier, it is provide consistent direction around what scenario we need to plan for so that we do not have to deal with developers saying, 'Oh, we don't agree with you.' We provide advice that is based on what we assume. Then there is always an argument about 'Well, what level?' So if there was consistency, we could actually blame the state, if you like – 'The statewide policy is this.' We currently do not have a clear one on what scenario to plan for. Am I right?

Joel LEISTER: Yes, that is correct. All CMAs are in agreement about what we should be doing, but it is still the CMAs who make that decision at this point in time. It would be much nicer with all the state guidelines we have because when developers challenge us it is much easier to respond by going 'It's not our decision. The state policy says X' or 'The state guidelines say Y'. It is much easier to defend, because then we do not have to have the argument with the developer. We can fall back on this broader policy position. That happens with sea level rise at the moment, which thankfully as an inland CMA we do not have to worry about too much – hopefully. If we have to worry about it, things have gone really bad. But in that sort of climate scenario, we do not have that at the moment. So we adopt the worst-case scenario and developers being developers always challenge it and go, 'Why are we out here? We could be in here. We're going to do all this future climate work. We're going to be in a much better position than what it looks like.' But as a floodplain group, we work in risk so we plan for the worst. We can always roll it back if we start doing things better, but the challenge we have is we sort of go in at a midpoint and things turn out worse than what they are. We have then had development go unchecked for a period of time and then we have actually increased our legacy issues and our risk that we do not have to respond to. It is much nicer to go, 'Let's go worst case and we can roll it back.' All it means is people might have a bit more freeboard.

Carl WALTERS: There is a great example around Shepparton and then Seymour. For anyone who has developed in the last 20 years, it is okay. For the people who developed before – unfettered development – it is not okay and they are suffering. Insurance costs are through the roof. All those sorts of things are a roll-on effect from not planning well and consistently. Our floodplain team do a really good job of holding a line, but it is then hard to get councils to support that line too because they are driven by 'We need to develop.' It is like, 'How do we do it sensibly?' That is the challenge.

Rikkie-Lee TYRRELL: Here it says something: 'group health' – I am referring to a document – and 'reducing membership declines'. That kind of caught my eye. Is the membership declining?

Carl WALTERS: Sorry, which one?

Rikkie-Lee TYRRELL: Is your membership declining?

Carl WALTERS: Our community that we deal with?

Rikkie-Lee TYRRELL: Yes.

Carl WALTERS: I think there is a massive decline in volunteerism collectively across the state and a massive decline in people turning up at things where you can have a sensible strategic discussion about what the policy is and what the changes are. So community involvement in some of that is shifting. We are also shifting how we talk with people and work with people, but that is one of the challenges I think we all have. It is people's time, put really plainly, I suppose. You feel as if people are more selfish with their time, but there is a reason why that is and maybe it is because they do not influence enough or maybe they have got other things they really want to focus on. I think there are a few things in there. There is a whole social science effort there, but I think that involvement of community in decision-making is really hard.

Rikkie-Lee TYRRELL: Okay. Thank you.

The CHAIR: Mr Ettershank.

David ETTERSHANK: Thank you, Chair. And thank you, Carl and Joel, for coming in today. Carl, you made a reference earlier on to the lack of a statewide approach to floodplain management programs. Would you like to elaborate on that a little?

Carl WALTERS: I am not sure those were my exact words, but I think the lack of consistency from the state around the climate scenario stuff is pretty obvious, and direction, and that is the state policy approach which we just talked about. I think one of the challenges we have is the waxing and waning of programs we do. I think I can say that, Joel; you are not going to growl at me afterwards. We try really hard to get support for floodplain reviews, if you like, around urban areas, and we do those. Currently at the moment post 2022 we have got 13 going on, and the ability to do that in the timeframes is a bit stretching. Those will get done, and then in between our forward planning will drop away a little bit. I think that is what you are referring to.

So consistent funding for floodplain management investigations across the state – it would be nice to have a consistency, if you like, that allows the forward planning of what we need to do, where we need to do it and what we need to think about well in advance of having to then respond to it. I think the forward planning approach to floodplain management in particular is really important because it is really hard to catch up after the event, and then you are always playing catch-up and the negativity and the problems of a post-event community are hard work. That preplanning, consistency of funding so the peaks and troughs of dollars – we are able to manage a little bit through our various programs, but in the end the peaks and troughs of planning and costs of doing forward works are one of those challenges that we have to deal with.

Joel LEISTER: I can add to that too. The committee will probably be aware there were changes to the planning processes after the 2022 floods, where the state provided some funding to help councils progress planning scheme amendments. That funding will expire in June next year. We will still have planning amendments to do going forward, so we will need to find further funding either via the CMA or councils to help progress that. So it is having that certainty around what the funding might look like.

What we were saying before about the lack of a consistent approach is really tied to: what is the climate scenario we need to plan for under climate change? The state is very clear through the *Planning and*

Environment Act and the *Climate Change Act* that we have to consider climate change. That is not up for debate; that has to happen. It is: what scenario are we planning for? Are we planning for SSP3-7.0? Are we planning for SSP5-8.5? They are two scenarios, both at the higher end, and they do have implications. One will result in a higher floor level for a property, but it will have a higher level of protection. That specific guidance is currently not available at a state level. The CMAs have made those decisions themselves, as has Melbourne Water, but we do not have that state guidance to fall back on right at this point in time. We are working on it as a collective, and there is a work group amongst the CMAs and Melbourne Water trying to put a position together to go back to the government. But that is probably one of the key bits we are missing at the moment.

Carl WALTERS: Can I just add one quick thing. The funding model for CMAs as an organisation is really quite interesting. We are almost completely project-based funding. We apply for dollars for whatever example comes up, and our programs are wide and varied – I know that – and from federal and state government. Our core funding is this much, so the floodplain role has core funding of this much; our usual, we have this much. So we absolutely need to make sure we have project funding to allow us to do all those things. They come in peaks and troughs, so we maintain a core while the funding goes up and down on top of that core. So really we clearly have to say to everyone that we are project-funded, and there is not a lot of fat in that stuff. Being able to then respond is one of the challenges.

David ETTERSHANK: For example, we have got a new edition of *Australian Rainfall and Runoff* about to be released. Presumably that would require then modification to all of your models. Would you have the resources for that, and what sort of a timeframe are you talking about to catch up?

Joel LEISTER: That is obviously a very interesting point. *Australian Rainfall and Runoff* recently revised its climate change guidance in terms of what the rainfall intensities need to be but also the losses. You are quite right that all our older studies in theory are now out of date because the guidance has changed. What we go through and do a process of is: rather than using a one-in-100 event, do we have a one-in-200 that we could use as a proxy for a one-in-100 with climate change? And that is what we do, because we do not have the funding or the resources to redo all our flood zones across our catchment in a timely manner. I know Melbourne Water are doing a similar process at the moment, but they have obviously a significant base of money that they can draw on. As a CMA we cannot. We rely solely on state funding to deliver these flood studies, and we do not have the resources to deliver them, because as Carl said, we have got 13 flood studies on the go at the moment. We do not have any extra staff to deliver that on top of our statutory workload.

The CHAIR: Carl, Joel, thanks so much for coming in today. We really appreciate the evidence that you have given. You will be provided with a copy of the transcript to review in about a week.

With that the committee will take a short break.

Witnesses withdrew.