

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into the 2022 Flood Event in Victoria

Melbourne – Thursday 12 October 2023

MEMBERS

Sonja Terpstra – Chair

David Ettershank – Deputy Chair

Ryan Batchelor

Melina Bath

Gaelle Broad

Wendy Lovell

Samantha Ratnam

Rikkie-Lee Tyrrell

Sheena Watt

PARTICIPATING MEMBERS

John Berger

Ann-Marie Hermans

Joe McCracken

Evan Mulholland

Rachel Payne

WITNESSES

Stuart Moseley, Chief Executive Officer, and

Bonnie Mather, Director, Planning Services, Victorian Planning Authority.

The CHAIR: I declare open the committee's public hearing for the Inquiry into the 2022 Flood Event in Victoria. The public hearing is for the Environment and Planning Committee, an all-party committee of the Parliament looking into the October flood event. We will be providing a report to the Parliament, which will include recommendations to the government. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the Aboriginal peoples, the traditional custodians of the various lands we are gathered on today, and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee. I welcome any members of the public in the gallery and remind those in the room to please be respectful of proceedings and to remain silent at all times.

For those of you that are giving evidence today, all evidence that is taken is protected by parliamentary privilege as provided by the *Constitution Act 1975* and provisions of the Legislative Council standing orders. Therefore the information you provide during the hearings is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded, and you will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

At this point I will take the opportunity to introduce myself, and then committee members will introduce themselves to you. I am Sonja Terpstra. I am the Chair of the Environment and Planning Committee. I am also a Member for North-Eastern Metropolitan Region.

David ETTERS HANK: Good morning. I am David Ettershank. I am the Deputy Chair, and I am a Member for Western Metropolitan Region.

Melina BATH: Hello there. Melina Bath – Eastern Victoria Region is my place.

Samantha RATNAM: Good morning. Samantha Ratnam, Northern Metropolitan Region.

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

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

Wendy LOVELL: Wendy Lovell, Member for Northern Victoria.

Ryan BATCHELOR: Ryan Batchelor, Member for the Southern Metropolitan Region.

The CHAIR: Thank you very much for those introductions. With that I will hand over to you to make your opening remarks. You will have 10 minutes – I will watch the time – and then members will have 5½ minutes to ask you questions. With that I will hand over to you, but also if you could just state for the Hansard record your name and any organisation that you are appearing on behalf of. Over to you.

Stuart MOSELEY: Thank you, Chair, and thank you, committee, for the opportunity to appear today. My name is Stuart Moseley. I am the Chief Executive Officer of the Victorian Planning Authority. With me is Bonnie Mather, who is the Director, Planning Services, at the VPA.

I would like to add my acknowledgement of the traditional custodians of the land on which we are meeting today, the Wurundjeri people, and pay my respects to their elders past and present and to the elders from any other communities who may be here today.

I will make a brief opening statement as I do not have a lot to add over what is already before you in the form of our response to the committee's initial information request. By way of background, the Victorian Planning Authority is a statutory authority established under the *Victorian Planning Authority Act 2017*, reporting to the Minister for Planning. We have a board of directors responsible for determining the general policies and strategic direction of the VPA, and our purpose is to provide advice and assistance to the Minister for Planning as directed by the minister. The organisation has around 120 staff skilled in place-based land use and infrastructure planning and associated fields. Our principal role, the role that successive ministers have required of us, is to prepare plans that guide urban growth in designated areas or precincts. These precincts that we have been triggered to work on are mainly in outer Melbourne, but we also have a number in established Melbourne – what you might call urban renewal areas – and a number in the regions: regional cities and peri-urban towns.

The primary way we do this planning is through preparing structure plans and planning scheme amendments. A structure plan is a spatial planning instrument that identifies where and broadly how land use, built form and infrastructure should be developed. It is a blueprint, if you like. Once approved by the minister these plans guide decisions on the issue of permits for the division of land, the creation of allotments and sometimes for other forms of development, the collection of infrastructure charges and the provision of infrastructure and services. Structure plans are given effect by being incorporated into the relevant planning schemes, and they are usually accompanied by infrastructure charging instruments – either development contribution plans or infrastructure contribution plans. The areas in which we plan are identified for us by the Minister for Planning, who is also the final decision-maker on the plans we prepare. It is important to note that the VPA does not develop or construct buildings, we do not develop land, we do not fund or deliver infrastructure, we do not undertake commercial land dealings and we do not acquire or transact land, and we very rarely have any role in the issue of planning permits. Our job is to set the rules by which land is developed, and then others undertake that.

We are not a flood management authority or a flood plain manager or a local drainage authority, and we are not responsible for operating the Victorian planning system, but we do have a specific role within it. The VPA assesses and plans for flood risk in accordance with state policy and based on expert advice from the agencies responsible for flood modelling and management. In metropolitan Melbourne that is Melbourne Water and in regional Victoria it is the relevant catchment management authorities, and in both cases we work closely with the relevant councils in their role as the local drainage authority.

Our plans are informed by drainage and flooding investigations, including a flood risk assessment undertaken by the relevant flood authority or by experienced and qualified consultants to the satisfaction of the relevant flood authority. The risk assessments are undertaken in accordance with current best practice, including consistency with *Australian Rainfall and Runoff 2019*, which is the industry bible for these things, and require allowances to be made for the impacts of climate change. The expert advice we receive is shared publicly as part of the public consultation process on our plans, and any unresolved issues raised during public consultation are usually referred to a planning panel or an advisory committee for review before the VPA finalises the plan and submits it to the minister for a decision. So that review and scrutiny process employs comprehensive and informed planning backed by the evidence that warrants it.

We adhere to Victoria's planning policy framework, which contains statewide planning policies that apply to all planning schemes in Victoria and sets the expectations for managing flood risk, including for how climate change is embedded into our plans. As I mentioned earlier, in giving effect to that framework we are guided by the relevant flood authority and by policy and guidelines on climate change data and information that is updated and maintained by the Department of Energy, Environment and Climate Action and then translated into planning policy according to guidance maintained by the Department of Transport and Planning. In other words, we operate as part of a system. We are there to deliver policy in place.

I am aware there can be competing views about the adequacy of expert technical advice and state policy guidance given the uncertainty around some aspects of climate change risk and the often highly technical nature of flood modelling. The VPA's position is that we act in accordance with current policy and best available advice. We are not a flood management authority ourselves, so we do not have the ability to substitute our own views for adopted state policy or our own technical views for the advice of experts. Before I conclude, it might be of assistance to the committee to know at the outset that the VPA has had no role in the planning processes or decision-making in relation to either the Flemington Racecourse flood wall or the Rivervue Retirement Village.

In conclusion, the VPA's role is to deliver structure plans to guide urban development in designated areas. In preparing those plans we evaluate and consider a range of strategic matters, including and particularly flood risk according to the processes and requirements set out in the *Planning and Environment Act*. We are informed by applicable state policy and expert advice. Either Bonnie or I would be happy to respond to any questions the committee might have.

The CHAIR: Great. Thank you very much for those opening remarks. I might start. I note all of your comments about what you are responsible for and the role of the planning authority, but I am interested in your comments around how the structure plans are developed. Then you work with councils, they then implement it, and they are the planning authority – they approve things et cetera. But I am just wondering what sort of work the authority does or should be doing in terms of looking at whether structure plans can or should be more responsive to the impacts of climate change or climate-related disasters, noting that of course people who live in the cities might have different considerations to people who might live in rural or remote areas, or even people living on the flood plains versus those people that are not. So it is bit of a big question, but I am really hoping you will be able to unpack that a bit for me – either of you.

Stuart MOSELEY: Sure. I might lead off. The board has the view that our role is to deliver current policy but also use the insights we gain from that to contribute to policy development in government. As all board directors have had in recent years, the issue of directors' obligations in dealing with climate change is something our board takes very seriously. I think it is a matter of what the board can do and how it is responsible to discharge the current policy framework. So we were very pleased when the *Australian Rainfall and Runoff 2019* edition actually introduced an obligation to factor in climate change. That has been effective. The work we did in the Arden precinct was based on a 2100 climate change conditions scenario – similarly at Bentleigh East village – and we are doing work currently in Shepparton that uses a 2090 climate change scenario. So that is a good step forward. Beyond that, whenever these exercises come up in government, like the review of sea level rise benchmarks, we provide submissions based on our lived experience.

The CHAIR: On the examples that you just gave around Arden and some of those other places, what sorts of changes in your approach have been triggered by the importation, I guess, of those new standards? What sorts of things are you seeing in how you might do that differently now as opposed to what went before them?

Stuart MOSELEY: I guess the simple summary – and I am not a hydraulic engineer, I am a town planner by background – is that before the 2019 issue of *Australian Rainfall and Runoff*, the data was based on historical records, and we know that that is not a reliable indicator of what is coming our way. So the new document provides an obligation to consider climate change. It gives an indication related to: for every degree of warming, what sort of change would you expect in the frequency and intensity of rainfall events? But the modelling then obviously has to work out what that means in terms of the watercourses and whatever is coming from the sky at that time. So in Shepparton, for example, there is very complex flooding, because there are three rivers – the Goulburn, the Broken and the Seven Creeks – and then what is falling from the sky, if it happens to be falling on Shepparton, also has to be dealt with. That is a good step forward, and that has increased our ability. Before that, if we had gone further and factored in climate change, inevitably that results in costs to developers in the precinct. They, as is their entitlement, could go to the planning panel or the standing advisory committee and say, 'The VPA has overreached here; rainfall and run-off does not warrant this response,' and we would have had to fight that case. Now, you can still argue – there is always room for an argument – but the obligation upon the VPA to factor in climate change cannot be disputed, and it is given effect through the Victorian planning provisions as well.

The CHAIR: That is right. I have got 1 minute 30 left on my clock, so I just want to ask then about climate-resilient assets. It is something that I find incredible, and it is probably a bit of a question you may not be able to answer because it is more about houses in these circumstances, but I have never understood why in Victoria people living in flood plains, for example, do not have their houses on stilts like they do in Queensland – the Queenslanders, for example. Do you think that might be something that you might now see in some of these communities that are already there, that might be recognised through structure plans?

Stuart MOSELEY: This is a very good point you make. The committee might want to look at a project in Sydney – the Flour Mill at Summer Hill – which is actually built on the banks of a flood-prone creek. The ground floor of all the buildings in that precinct – and it is not just car parking; there is a community centre – is designed to flood, and there are signs on the walls outside saying 'Floods to this height', 'Flood-safe egress'.

That is an example, I think, of a sophisticated approach, and Queensland does similar things; I know because I used to work there. If you go to areas like Teneriffe or the Gasworks precinct, everything on the bottom floor is sacrificial. You do not have lift motors or power transformers where they get wet. But you assume it will get wet.

The CHAIR: And that is an example of climate-resilient assets, right?

Stuart MOSELEY: That is right. I think that is where the future is taking us, and I am sure – it is not our wheelhouse – there are places within government where those sorts of responses are being evaluated. But in the environment we are heading into, to take, and I am not saying this is the view, but –

The CHAIR: I am sorry, but the clock has beaten me. I apologise for that.

Stuart MOSELEY: It was a good question. I was just warming up.

The CHAIR: Thank you. I know. Mr Ettershank, over to you.

Melina BATH: You can reply on notice.

The CHAIR: Yes, you can. Absolutely. If you want to add things on notice. Mr Ettershank, over to you.

David ETTERS HANK: Thank you, Chair. And look, I might pick up from just that point. You have said you did not do the flood wall and you did not do the review – I am taking that on board. I presume that that Maribyrnong catchment, though, is on your radar and within your purview.

Stuart MOSELEY: If and when we are triggered to plan for precincts, it is. We did do a lot of work under Minister Wynne's leadership for the defence site in Maribyrnong. In that situation we were absolutely engaged in how the river was to behave in times of flood, and that site has a levee on it which distorts the behaviour. But our interest in catchments and their behaviour is always triggered by having a remit to do a plan. At the moment we have no plans in the Maribyrnong catchment that we are working on.

David ETTERS HANK: I am just trying to work out who is doing what, I suppose. I am having some difficulty working it out on this one.

The CHAIR: It is complex, this area.

David ETTERS HANK: It is. We have got the Pagone report, which obviously has come up with some pretty profound criticisms.

Stuart MOSELEY: This is the Melbourne Water planning inquiry?

David ETTERS HANK: Yes.

Stuart MOSELEY: Thank you.

David ETTERS HANK: We have obviously got the lived experience of hundreds of people whose houses unexpectedly went under. We have got Melbourne Water now saying that they are doing new hydrological modelling that will be out in April. Obviously there were major fails by Melbourne Water through this process, both in forecasting and projection. Is there a role for the VPA, and if so, what is that role and what are its priorities moving forward, looking at that Maribyrnong catchment, maybe particularly focused around, let us say, the Maribyrnong township?

Stuart MOSELEY: Whether there is a role for us or not will depend on the government's policy settings about where they want to plan for urban renewal, densification, urban change. There are current priority precincts of government, the housing statement announced a number more – 10 activity centres. So government will from time to time say, 'This area is state significant; we're going to lead the planning of it,' and they might ask us to do that for them. That would be where our interest starts, but then we would always defer to the expertise of the flood authority. I am loosely familiar with some of the findings of that Melbourne Water inquiry report, and I think to me it underscores the absolute essential nature of a reliable set of data upon which to base a plan. And that is never a role that we – it is not our statutory remit; we do not have the tools. We take

that input. We do not accept it blindly, so we have got qualified engineers on staff who work with Melbourne Water or the CMA as these reports are worked up. Our expertise is translating that information into a land use plan.

David ETTERS HANK: All right, so there is no real short-term forecast for you to be involved in that. I will switch around a little bit then maybe. You talked about your involvement in the *Arden Structure Plan*. I am sort of next door, I am in the *Macaulay Structure Plan*; I was involved with that. I am interested in this context of climate change. There were a whole lot of flood overlays in Macaulay that were all removed some years ago. Manifestly the forecast is not good for future inundations or whatever. I am wondering what the VPA's position is there or why there were no changes to those in the last structure plan, given lived experience since then as well as what is expected from climate change.

Stuart MOSELEY: I know that within the Arden precinct there were changes to the flood overlays. There were extensive investigations undertaken. The *Arden Precinct Flood Management Policy* from June 2022 is a public document. Melbourne Water led that process with us. It was extensively scrutinised before the standing advisory committee into the *Arden Structure Plan*, and a position was arrived at that Minister Wynne signed off, I think from memory, in July last year. I am happy to take that one on notice if you need more detail. But Arden is a good example of a very complex set of flooding challenges, because water comes up from the bay in tidal surges, it comes down the creek and then there is the rainfall on the precinct itself.

David ETTERS HANK: And Macaulay is obviously cheek by jowl with it.

Stuart MOSELEY: Indeed, immediately next door.

David ETTERS HANK: Although the structure plans were done under entirely differently processes, one designed obviously to exclude the local residents. Could I ask you then specifically on notice if you could provide us with some background to the Macaulay plan, recognising that there are I think now five or six major multistorey redevelopments, all of which are being built in what was 10 years ago land subject to inundation but which is not now. And what does that tell us about the proactive approach to managing climate change?

Stuart MOSELEY: Very happy to take that on notice. But just to be clear, the VPA's involvement was primarily within the Arden precinct, not the Macaulay, so it may be that we need to – whoever the responsible planning authority was. It may have been the City of Melbourne; I do not know. But we will take that on notice.

David ETTERS HANK: Okay. Thank you.

The CHAIR: No problem. And the clock has beaten you.

David ETTERS HANK: I know.

The CHAIR: Perfect timing, Mr Ettershank. Ms Lovell, with a question.

Wendy LOVELL: Thank you. You were talking about doing precinct planning, particularly precinct planning in Shepparton. I am wondering what thought goes into when you do the planning for a certain area in a town, what planning goes into the overarching planning of population planning and transport routes and things like this, because obviously where we move population to affects all sorts of services and also the ability for the connectivity. In Shepparton, for instance, as you have mentioned, our three river systems meant that anyone to the west of the Goulburn or south of the Broken was cut off from health services. We were cut off from east–west travel from Benalla through to Bendigo. What level of thought goes into those things when you do a precinct plan? Particularly around Shepparton, I was wondering if you could me give me your views on, when you are doing planning there, what thoughts you put into that need for the second river crossing in Shepparton that is above flood level, because our causeway of course was closed in that event last year?

Stuart MOSELEY: I might have a start at that and then ask Bon to add value. Normally the way we work is we like to start with the regional picture. So in outer Melbourne we start by looking at the corridor. In Shepparton or another regional city we will look at the entirety of the city to understand its future growth requirements and opportunities, look at the evidence – as you know, there are Victoria in Future projections about what government thinks will happen; councils often have a different view – and then we work with the council on where and how that growth should be accommodated. Some of it hopefully can go in the established

area of these towns, where there are good services already, but a lot of it has to go in new estates. And then as part of that we look at the supporting infrastructure, not just roads and drainage but schools and health. Check the town centre; conserve it. That then provides a framework that leads into the precinct planning. In Shepparton we have done one – I think it is north-east; we are now working on south-east – and it is all in a document called *Shepparton & Mooroopna 2050*. We like to make sure that the precincts we are working on sit in a bigger picture. The specifics you raise about how that Shepparton–Mooroopna structure or town framework deals with the issue of river crossings I do not recall. Do you know, Bonnie, or shall we take it on notice?

Bonnie MATHER: No. We will probably take on notice the crossing that you are specifically mentioning. But to Stuart’s explanation in terms of looking at those issues – obviously, if we did have a river crossing, we would look at that in terms of what is appropriate infrastructure and access and those flood levels that might be an issue in terms of negation.

Wendy LOVELL: It is a very important issue when you look at anything that you are developing in Mooroopna or anything in the south of the town, because all of those services – health services et cetera – are located to the north and sort of east of Shepparton and people were completely cut off from those during the floods.

Stuart MOSELEY: Yes. We will take that specific question on notice. It might interest you to learn that my board and executive team spent the day in Shepparton last month and got a really detailed briefing from the council on all of this stuff, because we are always keen to make sure the work we are doing is informed by flood evidence. That 2022 event was significant, and all flood managers now factor that in, or should.

Wendy LOVELL: Are you having any input into providing advice to councils on amendments to planning schemes to cope with new flood levels?

Stuart MOSELEY: No, that is not our wheelhouse. That is the Department of Transport and Planning.

Wendy LOVELL: Are you aware of what work has been going on in that area and what advice is being given to people as they are trying to rebuild?

Stuart MOSELEY: In general terms, but again, our main interest, so we understand – in Shepparton, for example, there is such a planning scheme amendment being worked up, and we are talking to council and the department to make sure that our work for Shepp south-east marries into that. Bonnie, is that –

Bonnie MATHER: That is correct, yes. Occasionally, if we have a precinct that we are working on where another authority may be preparing a flood management plan, we would make sure our plan is consistent and/or provide any kind of advice back to them, but we would never lead any flood management commitment as such.

Stuart MOSELEY: Often our work will actually modify those LSIOs, because as development occurs you can manage flooding in an integrated water management framework. So we work with but often we also influence that other area-wide work.

Wendy LOVELL: We have heard that a lot of the flood plans just did not cope with the floods last year. I am just wondering if you are having any input into the work that is being done on modifying the flood plans or what information is coming to you as you are trying to do precinct plans for new developments around the changes to flood plans.

Stuart MOSELEY: We, under the leadership of our board, went back and looked at all the precincts that we had planned which were impacted by that October 2022 event – also the January 2022 event – to check whether the flooding had behaved in the way that we had expected it to when we wrote the plans, and the answer was: it had. So that was refreshing.

The CHAIR: I am sorry – the clock has beaten you. Apologies for that. We are going to have to move onto the next question. Mr Batchelor, a question, please.

Ryan BATCHELOR: Thanks very much, Chair. Thanks very much for coming in today. You have obviously got a key role in precinct planning at a structural level. Your submission says, at the top of page 4, that

your first principle is to avoid development in flood-prone areas. How dynamic is your assessment of what is a flood-prone area?

Stuart MOSELEY: We work on the guidance, which talks about one-in-100-year average exceedance probability and which includes allowance for climate change, but it is dynamic, because, again, if I can use Shepparton as an example, the behaviour of the flood plain there is influenced by historic drainage channels put in for irrigation purposes that are now obsolete. There are also changes of levels from, say, historic extraction of sand or loam that changes flood behaviour, and when we go in and do a structure plan – and Shepparton council are particularly proactive here – we set up public acquisition overlays so that the council can go in, secure land and make sure it works for a drainage purpose. And that then changes the extent of land that is flood-prone. And there are other measures: upstream detention and retention, integrated water management solutions. So the benchmark is the one in 100, including climate change, but how it works in place is dynamic.

Ryan BATCHELOR: Do you think that given what we know about climate change – where it is going – that one-in-100 AEP, the 1 per cent AEP, is sufficient or continues to be appropriate, or have you thought about whether it continues to be appropriate, particularly in precincts that are connected to a tidal zone, where you have got the confluence of changes to sea levels and tidal activity with river systems? We have had the experience in this inquiry of looking at what is happening in Maribyrnong. My colleague Mr Ettershank has talked about Macaulay. I am interested in what the future holds for Fishermans Bend. They are all areas where you are getting rising sea levels, probably more intense weather events and increasing urbanisation and urban renewal precincts. Is one in 100 the right benchmark for these sorts of developments in the future?

Stuart MOSELEY: I think that is a very important question for public policy and something my board has discussed. I think we take comfort from the fact that it is now one in 100 including allowance for climate change.

Ryan BATCHELOR: What does that mean?

Stuart MOSELEY: So according to *Australian Rainfall and Runoff*, which I will not quote to you because I am not intimately familiar – but that sets guidance. The records in ARR obviously are historical averages and for the last number of years have started to reflect more frequent and intense rain events, but there is this considerable period of record before that where they did not. So there is a recognition that the average is not an indicator of the future, and ARR gives guidance around what assumptions should be made in terms of rainfall projections and what increase is expected in intensity or depth per degree Celsius of local warming. At the moment my advice is that it is about 5 per cent. I am not an expert, but where I was heading with the response was: at the moment the state benchmarks are the state benchmarks. Something the committee may wish to inform itself on is Moyne council amendment C69, where the Moyne shire and Glenelg Hopkins catchment advocated for a sea level rise benchmark of 1.2 metres instead of the state benchmark of no less than 0.8. That went through an extensive process, and in the end the view was taken that that sort of decision is rightly one for state governments to make, not for councils or, I would say, authorities to make of their own volition.

Ryan BATCHELOR: Is the VPA involved in the planning around Fishermans Bend, or is that a separate authority?

Stuart MOSELEY: No.

Ryan BATCHELOR: Who is the authority doing that?

Stuart MOSELEY: That is the Department of Transport and Planning through the policy and precincts team.

Ryan BATCHELOR: We will follow that up with them. Obviously, I think that now is the time, in preparation for tens of thousands of people potential living in these new communities, that we need to be taking into account not only rainfall change but what is happening with the ocean and the sea and the tides as well. I am really interested in those comments you made about that development in Summer Hill in New South Wales, so we might follow that up. It strikes me that we need to both raise the level in flood-prone areas but also maintain things like the move towards zero-level entry and accessibility of houses; they can often be in conflict. It is probably not quite a structure-planning issue but something that we probably need to think about as well. I might leave it there, Chair, given I have got 10 seconds to go.

The CHAIR: Yes, awesome. Excellent timing. All right, thank you very much, Mr Batchelor. Dr Ratnam with a question, please.

Samantha RATNAM: Thank you very much for your submission and for being here today and for your clear answers so far as well. Just picking up on an answer to a previous question talking about areas that had been impacted by the floods in 2022 that had been under your jurisdictional purview in terms of the initial structure plans, do you all have a list of those somewhere in terms of those areas?

Stuart MOSELEY: Yes. I would be happy to provide that information back to the committee.

Samantha RATNAM: And it is my understanding, then, that you did some sort of review or looked at what happened and whether the modelling behaved as it should, as you alluded to?

Stuart MOSELEY: Yes.

Samantha RATNAM: Okay.

Stuart MOSELEY: We basically looked at the satellite imagery at the height of the flood event, where it was available, and talked to the council and the relevant flood authorities to check that, and then we basically checked whether that was what we expected and designed for in our structure plan.

Samantha RATNAM: Great. Well, it is really welcome to hear that that kind of review and audit is being done. It has been something we have pursued with the other agencies as well given the nature of the event and needing to prepare for the future, so we really welcome that kind of review process.

I am interested in what you talked about as well in terms of those flood management plans and the land subject to inundation overlays. I guess we are talking interchangeably about the same thing there. While you all might not apply them, you are doing precinct structure plans for areas that might be subject to inundation. You talked about mitigation works that can impact the application of the LSIO. How do you all do that structure planning then? If, for example, it is proposing some development in a flood-prone area, do you just leave that then to the planning authority after you do the structure planning saying, 'subject to this'? You know, if some works were done in this area, you could then allow development of this kind of scale – is that the kind of advice you are giving?

Bonnie MATHER: With the advice of Melbourne Water or the catchment authority, they would tell us what the extent of the LSIO might be. We are involved with adjusting overlays like the LSIO to ensure that the flood levels are correct in terms of what Melbourne Water are predicting or the catchment management authority are predicting. Because our structure plans are looking at adjusting the types of uses on the land that is surrounding that watercourse, there is obviously an extent of change in terms of the LSIO.

What we also do in our structure plans is ensure that – to the points previously around what is appropriate on flood plain areas – we look at alternative uses. So housing obviously would not be something that we would recommend to go into an LSIO area, but we look at alternative uses like recreational uses and the like.

Samantha RATNAM: Great. That is really interesting – thank you for that – because I understand that, as you mentioned, you were not the authority responsible for the precinct planning for the areas around the Rivervue Retirement Village, for example.

Bonnie MATHER: Correct.

Samantha RATNAM: But it strikes me that in terms of that initial planning that allowed for residential development in that area, one of the things that we have heard during this inquiry is that although it was covered under an LSIO, through the planning permit application process there were some really integral moments – and it is a while ago, so I am not sure if all the documentation still exists, but we will still keep digging around for it – around 2011 when there was a planning permit issued, but there must have been some conditions that said 'Subject to mitigation works, more development can be allowed'. So then the developers said, 'Well, we've done those works. Now you need to update the LSIOs to reflect the fact that we can now build on those areas,' essentially. Do you all have a view in terms of those checks and balances on where they should sit, for example, if the flood mitigation works are not actually effective and do not do the desired job although the proponent said they would do it? Do you all have no responsibility after you do the structure

plans? Do you all have any view of how you manage that kind of evolution of a structure plan and what is allowed when somebody then says, 'Well, we've now done some things that could allow the development that you didn't initially propose'? How do you all approach that?

Bonnie MATHER: Obviously we are not across the details of the Rivervue permit application –

Samantha RATNAM: Of course.

Bonnie MATHER: and there are allowances with the P and E Act to enable permits to be adjusted. I know that previous parties have spoken to the application in terms of the subsequent amendments to those permits being referred to Melbourne Water as well and the requirements for them to review any changes to those permit applications. So I would suggest that the P and E Act and the requirements from the planning scheme do enable an amendment process to happen but with checks and balances with the relevant authority to check that as well.

In terms of the structure plans, they are long-term structure plans – you know, 20-, 30-year structure plans – for land use development. We cannot predict everything that will happen on that land in terms of built form outcomes because we are not involved with the detailed planning of those land use applications. We do work closely with the councils regularly in terms of what is happening on the ground, and we can make changes if required, but usually it is done through a planning scheme amendment process again that is involved with catchment authorities and signed off by the Minister for Planning in terms of any changes that would be required.

Samantha RATNAM: Great. Thank you, I really appreciate that. We are all learning a lot more about the intricacies of the interdependence of these parts.

Bonnie MATHER: It is very detailed.

Samantha RATNAM: But it is good for us to know, because when we make recommendations about how these things have to be improved in the future – because things did go wrong; the 2022 event really has revealed that – it is important for us to consider those. So thank you, that is really helpful. I have another question as well. Particularly in the areas that you have jurisdiction over, there might be lots of existing dwellings on flood plains. Does the VPA see buybacks as an option? I am happy for you to take that on notice if we run out of time.

Stuart MOSELEY: Short answer: not our wheelhouse. We do not have a view on that.

Samantha RATNAM: Not your wheelhouse. Okay, great. Thank you.

The CHAIR: Great. Thank you. Ms Bath with a question, please.

Melina BATH: Thank you. Thank you very much. Yes, the world of education starts with inquiries. I have got a lot of questions, but I will just try and drill it down. This is not your wheelhouse, development in flood plain areas, but I am interested about engineering out flood risk and indeed retarding basins, and we have heard about the Arundel retarding basin up north of Keilor upstream. I know – I have just looked it up – Clyde Creek retarding basin got the go-ahead about 10 years ago now. What is your role in looking to engineer out or provide – you are providing advice to government. How does that work? Part of the mitigation about floods is about these retarding basins, so could you speak to that?

Stuart MOSELEY: Sure, and again if I can use Shepparton as an example, the precinct plan for Shepp south-east, which we hope will be out for public consultation in the coming months, re-engineers, according to an integrated water management philosophy, how water is handled when it falls on or runs through or floods up into that precinct. So by designing in, looking at them, five retarding basins, you can slow the flow of water through to the river. You can create water bodies that have an amenity, biodiversity and recreation value. You can actually improve the quality of the water. But it also means that the amount of land subject to flooding adjacent to the river is modelled to be less once those basins are in place. Now, that is a bit different to the examples you cite, which I think are very big, but the principle is, I think, that the old days where engineers would turn their minds to constructing concrete channels that move the water as quickly as possible in as large a volume as possible to the nearest river or bay outfall is not best practice anymore. And if you do these things right, then they have multiple values.

Melina BATH: They have an environmental value.

Stuart MOSELEY: Precisely.

Melina BATH: Attracting microenvironments and a nice place to go and be, as well. And the cost of that – ultimately, who is wearing the cost of that, and what is your opinion on that, if you have one?

Stuart MOSELEY: In our world, which relates to precincts undergoing change, the position is that the landowners in the precinct, through development contributions of one form or another, would meet the cost of the infrastructure required to service that precinct, but we would apportion that. If that precinct is dealing with inflows from upstream that are beyond what you would expect, then we would probably not apportion the cost entirely, so there is an apportionment that goes on.

Melina BATH: It is user benefits, but – or no, it is not user benefit. It is onus required, but who is that onus on?

Stuart MOSELEY: And the precinct ought to meet the cost of dealing with their issues, but it might not be fair to lumber them with the costs of dealing with other people's issues which are displaced onto them. Is that something you might like to comment on, Bonnie, in terms of the principles? Because there are a number of different charging instruments that we use.

Bonnie MATHER: There are, yes. Obviously, and I think other parties have mentioned this as well, the greenfields has a well-understood development services scheme model which does enable a charging and pricing process associated with Melbourne Water's plan. So they do plan, and we get that data in terms of retarding basins and locations of where water should be retained and held and then run off, and the services scheme is managed by Melbourne Water in terms of those landowners. So the subdivision application process triggers the requirement for the landowner to pay that fee to make those improvements to the drainage requirements. That is in the greenfields scenario. In the metro scenario we do not necessarily have a clear charging scenario that Melbourne Water can leverage off or the catchment management can leverage off. So that is something that we have to work through in terms of the development contribution plans that Stuart has just referenced, how we can embed that charge into those structure plans as well.

Melina BATH: And how is the community informed about those structure plans and potential funding requirements or proportions? How do you see that? How is that involvement of, I guess, the end payer – how do they have an opportunity to make comment and construct?

Stuart MOSELEY: Our normal practice is to develop our structure plans and engage with owners as we do that, as is appropriate, but really a lot of weight is placed on the public consultation process, and that involves a period of usually two months, within which –

Bonnie MATHER: One month.

Stuart MOSELEY: One month, and sometimes longer.

Bonnie MATHER: In terms of the requirements of the P and E Act, one month.

Melina BATH: Okay, thank you.

Stuart MOSELEY: Any landowners can comment, and the ones who are concerned that their land might be set aside for drainage when they think it should be a shopping centre definitely comment. And we exhibit all the costs at that point, so it is clear how much is going to be asked for, and that is commonly an issue that planning panels or a standing advisory committee hear from owners about, who say, 'This is too much; it's not fair. It should be less. It hasn't been done right.' So we are held to account for doing that properly.

Melina BATH: Okay. I have got a couple of quick questions –

The CHAIR: Sorry, time has beaten you, Ms Bath. Ms Tyrrell with a question, please.

Rikkie-Lee TYRRELL: Thank you very much, Chair. I just wanted to know: have you made any changes to your planning policy since the flood event in 2022, at all?

Bonnie MATHER: We cannot make changes to our policy. We are implementing state policy.

Rikkie-Lee TYRRELL: Are you advising differently now, since then?

Stuart MOSELEY: What we have done is go back and check whether that event was outside the scope of what we had anticipated, and it was not. So our plans coped with it, so that is good. But the next thing we have done of course in future work, and we did this at Shepparton, is to make sure that the flood authority has factored that event into their modelling, because they should always be calibrating their models against real-life events as they occur. We expect they will do that so that the advice they give us is truthed against that event. We make sure that we future-proof.

Rikkie-Lee TYRRELL: Okay. Thank you. Do you have any advice to the committee that we could use to benefit our report – from your expertise that could help us?

Stuart MOSELEY: In terms of our role, the things that are most important to us in this space are that there is accurate modelling for the precincts, ideally when we start. Because if the minister says to us, ‘VPA, go in and do a precinct plan,’ and the flood authority says, ‘Well, it is going to take us two years to do the flood model,’ we would rather the good flood model was there. That is the first thing, so that we have got the data. The second thing would probably be the point Bonnie raised – that whilst the development services scheme model works well in greenfields Melbourne, there is not an equivalent for urban renewal in Melbourne or for the regions. Sometimes the councils are quite able to use the P and E Act, but it would be good to have that model available in those other settings because of the certainty it gives that the required infrastructure will be funded. That allows the provider of that infrastructure the confidence to build it early, which addresses the point you raised about the transition process. Then the third thing would probably be – and having practised previously in Queensland and South Australia and New South Wales – Victoria has this way of treating land as either encumbered or unencumbered open space. Encumbered open space – its primary purpose is drainage. It is not counted as valuable for anything else. Unencumbered is recreational, passive and active. In practice land that has a drainage function could still be very valuable for other purposes, and yet at the moment the system does not recognise those shades of grey. So I think that would be the third one, just having better tools to deal with shared use of land that has a drainage function that can do other stuff as well, because it does not get wet often enough to stop it being, say, a playing field or whatever.

Rikkie-Lee TYRRELL: Bonnie, did you have anything to add to that?

Bonnie MATHER: No, I think Stuart summarised it well.

Rikkie-Lee TYRRELL: All right. Thank you.

The CHAIR: So 2 minutes and 20 seconds – do you want to come back or do you want to just call it?

Rikkie-Lee TYRRELL: No, I am all right.

The CHAIR: Good. Okay. Excellent. Thank you so much for that. Ms Broad, with a question, please.

Gaëlle BROAD: Thank you very much for coming today, really appreciate your insights. You mentioned that you are doing some work in regional areas. Did you mention that you are going to provide a list of those? Yes. Okay. Just off the top: I guess you said Shepparton, but are you doing work in Bendigo or Rochester?

Bonnie MATHER: Not in Rochester. For Bendigo regional employment we are doing some work.

Stuart MOSELEY: It is a precinct near Marong basically, an employment precinct south of Marong township.

Gaëlle BROAD: Okay. So specific areas.

Stuart MOSELEY: Yes.

Gaëlle BROAD: Okay. I guess then I am interested in your insights with the planning background. Wodonga, I have heard, has been very well designed. It got some help from the state to enable some of the modernisation of that town – lots of rivers around there, but very little flooding. Yet in Bendigo, when you look

at it, there has been a lot of development and then there is flooding – built on a tiny creek kind of space. Are you aware of the shortages of planners in regional areas, and what impact do you think that that has on being able to implement and stay true to a planning scheme?

Bonnie MATHER: I think there is absolutely a shortage of planners in regional councils. It is often why we are called in – to help with the work in the regional council areas when there is a shortage of availability of planners. I probably cannot comment to how their ability is to maintain their planning scheme; I am not involved in that element. But I know that other departments as well are experiencing similar shortages across the board in both metro and regional councils.

Gaëlle BROAD: Okay. It is very interesting, because we have heard feedback that some of the big projects in Melbourne are attracting talent from the regions and creating a bit of a shortage there, which is really challenging. I guess what we have heard from councils is it is quite onerous, it takes a long time to get amendments made to the planning scheme, but with the bushfires there have been overlays put over a large area. Do you have any comment on whether or not a recommendation from this inquiry to look at something like a flood overlay would help different areas and speed up that process?

Stuart MOSELEY: Again, not our wheelhouse, but as a matter of principle I would say any state interest ought to be able to move quickly into the rules in the planning scheme and be updated when it changes. By ‘state interest’ I mean things like the state road network, bushfire risk and flooding risk. Queensland is very good at this. They map a whole heap of state environment hazards and habitat, and those things are held by state agencies and almost have automatic status to be updated into planning schemes whenever they are changed by the agency who holds the state interest. As a matter of principle as a planner, I would say having that information accurately moved into planning schemes quickly is an important thing. How that works in Victoria and where the issues are, that is a matter for our colleagues in DTP.

Gaëlle BROAD: We have heard it seems to take an excessive amount of time. When you think we have had 63 local government areas impacted by this, it is asking a lot of different individuals to try and enact change when perhaps a state approach would be a lot better.

I am interested with developments occurring in places like Bendigo, huge new developments. Some have indicated that they are being developed in areas that do flood, which is concerning, but a lot of houses are built with concrete slabs; dirt is lifted – does that then impact? Could an area that was not going to be flooded potentially then flood because of the increased water flow with development?

Stuart MOSELEY: That is picked up in the methodology for the flood studies. It is what is called afflux, so the rule is zero afflux – there should be no detrimental impacts either upstream or downstream from the flood measures in a precinct. That can sometimes be quite a complex challenge. But I would say, I am not sure whether you are hearing from the Shepparton council, but they have done a lot of work to look at how the flood affected subdivisions from different periods, and it is very clear that over time flood-compatible design is getting much better. The most recent subdivision in Shepparton weathered that particular storm event very well. The earlier ones had much higher incidence of dwellings being affected.

But to get to your point, there are these things called depth–velocity relationships. I do not know if you have talked about them, but basically you can flood to quite some depth, but if all the water does is bubble up and bubble down, it may not be a problem. On the other hand, you could have flooding that is much shallower, but if it is fast moving, it will scour out access and risk life, and this is the thing that *Australian Rainfall and Runoff* tries to help people deal with. It does take a dynamic and nuanced design response, as we were talking about earlier. A simple rule of ‘Nothing should ever get wet’ is not the best response, and I am not aware that anybody does that anymore.

Gaëlle BROAD: It is interesting. The Bendigo Creek is a small creek that has got levees on the side that have now been broken and damaged, and yet thousands of houses around Huntly and Epsom are kind of sitting ducks if a flood event occurs again. There has been a lot of discussion about levees, but what is your view on that? Has the department been looking into the benefit of levees for protecting areas of houses and roads and that sort of thing?

Stuart MOSELEY: Speaking from the work –

The CHAIR: I am sorry, Ms Broad, but the clock has beaten you. I apologise for that. I would just like to thank you both very much for coming in and giving your evidence today. It has been very interesting to learn about your role as a planning authority as well, so thank you very much.

Witnesses withdrew.