

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Climate Resilience

Melbourne – Wednesday 20 November 2024

MEMBERS

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David Ettershank – Deputy Chair

Melina Bath

Gaelle Broad

Jacinta Ermacora

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WITNESSES

Tiffany Crawford, Co-Director, Climate Change and City Resilience, Melbourne City Council; and

Rena Littlejohn, Director, Planning and Environment (*via videoconference*),

Melissa Burrage, Manager, Climate Change and Sustainability (*via videoconference*), and

Andrew Joseph, Team Leader, Community Resilience and Emergency Management (*via videoconference*), Mornington Peninsula Shire Council.

The CHAIR: I declare open the Environment and Planning Committee's Inquiry into Climate Resilience in Victoria. This is the Environment and Planning Committee, an all-party committee of the Legislative Council of the Victorian Parliament, looking into climate resilience here in Victoria. We are going to be providing a report to the Parliament which will include recommendations to the government. Can I ask everyone joining us to ensure that your mobile phones are switched to silent and try to minimise the background noise.

I begin by acknowledging the traditional owners of the land we are meeting on here today, the Wurundjeri people of the Kulin nations, and pay my respects to elders past and present and acknowledge any Aboriginal and Torres Strait Islanders who may be participating in the proceedings of the committee today. I welcome anyone who is watching along at home or joining us in the public gallery. I ask everyone to be respectful of the proceedings and remain silent at all times.

All evidence that we take is protected by parliamentary privilege as provided by the *Constitution Act 1975* and the provisions of the Legislative Council standing orders. Therefore the information that witnesses provide today is protected by law. You are protected against any action for what you say during the 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 the witnesses 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.

Welcome, everybody. My name is Ryan Batchelor. I am the Chair of this committee and a Member for the Southern Metropolitan Region. I ask my fellow committee members to introduce themselves, starting with David.

David ETTERSHPANK: David Ettershank, Western Metropolitan Region and Deputy Chair of the Environment and Planning Committee.

Wendy LOVELL: Wendy Lovell. I am the Liberal Member for Northern Victoria Region.

Sarah MANSFIELD: Sarah Mansfield, Member for Western Victoria.

Melina BATH: Melina Bath. Good morning. Eastern Victoria Region.

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

John BERGER: John Berger, Member for Southern Metro.

The CHAIR: I will ask each of the witnesses if you could introduce yourself and the organisation you are appearing on behalf of for the Hansard record, please.

Tiffany CRAWFORD: Thank you, Chair. I am Tiffany Crawford. I am the Co-Director of Climate Change and City Resilience at the City of Melbourne and co-chief heat officer.

Rena LittleJOHN: Rena Littlejohn, the Director of Planning and Environment at the Mornington Peninsula Shire Council.

Melissa BURRAGE: I am Melissa Burrage, Manager of Climate Change and Sustainability at Mornington Peninsula Shire Council.

Andrew JOSEPH: Morning, all. I am Andrew Joseph. I am Team Leader, Community Resilience and Emergency Management, also at the Mornington Peninsula Shire.

The CHAIR: Wonderful. I might ask each of the organisations for an opening statement, and then we will move into questions. Renae, I might start with you on behalf of Mornington Peninsula Shire Council.

Renae LITTLEJOHN: Yes, thank you. Thank you for the opportunity to present at this inquiry today. The Mornington Peninsula Shire covers an urban, rural and coastal area. It is located within Melbourne's food bowl, and the food economy on the peninsula is the second highest value food production per hectare in Victoria. We have 10 per cent of Victoria's coastline. We are vulnerable to sea level rise, erosion and tidal inundation. We have a population of over 170,000 people and an additional 8 million visitors to the peninsula annually, and only have two access routes, so both residents and visitors are particularly vulnerable to emergency events, especially bushfire.

This is how we are affected by climate change. It is having a huge impact on our local environments, public infrastructure and local communities. There is more frequent and intense rainfall, resulting in a range of impacts including flash flooding, and there are more severe storms. The 2021 storms resulted in a huge loss in telecommunications. There is sea level rise, erosion, storm surge and tidal inundation, more intense hot days and prolonged heatwaves. And with 70 per cent of our municipality being green wedge, we are highly prone to bushfires. There is a big impact on food security. Shock and stresses can affect food loss and waste throughout the food system. During the 2019 and 2020 bushfires there was food loss on farms directly impacted by the bushfires, and we know that this is going to impact the agricultural sector into the future.

We would like to highlight four key points in particular. One is around our vulnerable communities. Many within our community are highly vulnerable to the impacts of climate change: 28.4 per cent, which is above average, live with two or more chronic diseases; 24.6 per cent are aged over 65, and they are highly susceptible to the impacts of extreme or prolonged heat. We have residents experiencing rental stress and homelessness – 35 per cent of our residents are in rental stress. On any given night in 2023–24 there were up to 689 people experiencing homelessness. We have a large construction sector, representing 14 per cent of our employment base, and they are at risk in high temperatures. Eleven per cent of our population are over 75 years of age. We believe that we require targeted programs offering both financial support and assistance and that these would be critical to ensure equitable transitioning through to a low-carbon economy. Funding barriers are also an issue. The costs associated with managing the impacts of climate change are huge and will continue to increase significantly into the future. Funding is needed to build infrastructure, to improve standards and also to help build community and business resilience. When considering coastal hazard risk alone, the impact of inaction on built assets on the peninsula is expected to be in the order of \$8.7 million annual average damage in the short term, \$22.1 million AAD in the medium term and \$69.7 million AAD in the longer term, and this will have constant effects on the agricultural sector as well.

As extreme weather becomes more frequent, council's budgets struggle to keep up with the mounting costs. Communities are struggling with rising insurance premiums and the costs associated with rebuilding to new climate resilient standards. Our climate is simply changing faster than our infrastructure can be upgraded. We really believe that we need funding opportunities from other levels of government. We feel that this is essential to respond to these growing needs. There is also a need for a consistent statewide data and community capacity building so that there is a consistent approach to assessing climate change risks across Victoria. This would help provide clear direction across departments and local governments and help avoid unnecessary work, duplication and sometimes error. We would encourage the state government to develop a standardised, government-endorsed methodology for assessing risk, vulnerability and economic and financial impacts that councils can use and also community and other entities can use to inform their decision-making. In addition to that, we would request that the state government consider developing a statewide approach to community capacity building to ensure that our entire community is well-educated about their specific climate change risks and supported to build their capacity to adapt.

Lastly is just that need for improved energy resilience. This is very, very important as parts of the Mornington Peninsula experience power and communication blackouts during storm events, resulting in considerable disruption to businesses and households and severely limiting emergency communication. So to better prepare communities for future disasters, we would urge that the state government consider advocacy to telecommunications providers to install backup power generation on all telecommunications towers to ensure

reliable communication during and after emergencies and to help minimise risk to life, and work with the Commonwealth government to expand the disaster recovery funding arrangements to include heatwaves and droughts to support councils who might need to set up a relief hub or to provide other emergency services during either of these climate emergencies and include funding for betterment to allow councils to reconstruct disaster-impacted assets to a higher standard so that we can better withstand future disasters.

That is us, Mornington Peninsula, in a nutshell, and I really want to thank you for giving us the opportunity to present at the inquiry today.

The CHAIR: Thanks very much, Renae. Tiffany, over to you.

Tiffany CRAWFORD: Thank you, Chair, and thank you for the invitation to talk to City of Melbourne's submission to the Inquiry into Climate Resilience. Local governments around the world have been working at the heart of climate action – and when I say 'action' I mean both mitigation and adaptation – for many years, and that includes my team. The importance of the role is increasing as the impacts of climate change intensify. However, the costs of adapting cities and infrastructure for a changing climate are significant, and the City of Melbourne's average annual damages to council assets from climate change hazards are projected to increase by 1200 per cent over the next 75 years. That is modelling that we have had undertaken for us. The role of local government, though, in this space I do not think is yet well understood. We still do not necessarily have the social licence or understanding at the community level of what role local government has been playing for many years and continues to play.

Long-term, secure sources of funding to improve climate resilience are necessary. Whilst grants-based initiatives like the Disaster Ready Fund have the right focus on preparedness, the ongoing funding available is limited and provides no steady stream of investment or security for longer term, iterative work to be undertaken. We think this is a real opportunity for the Victorian government to support the critical role of local government to futureproof the safety of citizens, assets and critical services.

As I have said, local government does play a critical role in protecting the community from climate change, and this is through the delivery of roads, buildings, open space, drains and other local assets. And when I talk about other assets and infrastructure, I include green infrastructure like trees and other planting. We are also the level of government that communities turn to when climate disasters occur. Climate change is already impacting both our assets and our communities. We are seeing extreme weather impacts more frequently. For example, our communities were impacted by the October Maribyrnong River flood event, and that community is very concerned about how Melbourne Water's flood modelling, which was released earlier in the year, is going to impact them in the longer term. In another example, this year the Moomba parade in Melbourne was cancelled for the first ever time due to extreme heat, and we know the amount of extreme heat days is forecasted to increase. Just to contextualise the city context, for example, and how that is different to, say, the Mornington Peninsula, it might be well known to the panel that cities are often 4 to 6 degrees hotter than other areas that have access to open green spaces because of the built-up infrastructure. We will face ongoing challenges in maintaining our trees and open space, with drought and water insecurity, but these assets are critical as well in the services that they provide in adapting our city and cooling it.

As extreme weather events and storms become more frequent and intense, there is a higher risk of damage or failure to all infrastructure, whether a road or green asset, stormwater system or community facility. It will be those most vulnerable community members that are impacted the most. That includes the elderly, people living with a disability, people experiencing homelessness and those in social housing or public housing and high-rise buildings. We know that communities who are well prepared for natural disasters are more likely to withstand impacts, and this is why we have been working on community resilience alongside climate action. As stated in Infrastructure Victoria's *Weathering the Storm* report, governments can build infrastructure in safer, less hazardous locations and they can build infrastructure using materials or designs that minimise impacts of climate risk, which is why the City of Melbourne are developing a policy to make sure that new assets meet minimum sustainability and climate change resilience standards. We want to build a climate-ready future. In addition to increasing community resilience, we know there are financial benefits in acting sooner to reduce risk rather than retrofitting assets in the future.

In regard to our specific recommendations, I will speak to three areas. I have spoken about the need for long-term, secure sources of funding. Of course we are always going to be talking about funding, and we would love

to see a secure funding stream for all councils in order to uplift council assets to be more resilient to disasters. I have spoken about the federal government's Disaster Ready Fund with that focus on community preparedness, but we are dependent on longer-term, secure sources of funding. The current settings really set councils up to make a tough choice between essential service provision, the business-as-usual provision of infrastructure or being able to innovate for climate-resilient infrastructure that is ready for the future. We think there is opportunity for the Victorian government to support the critical role of local government in this regard to futureproof the safety of citizens, assets and critical services. Across the world, analysis is focused on bridging the gap in unlocking climate investment and accessing climate finance by using subnational governments such as local governments, who are at the front of delivering climate-resilient infrastructure. We welcome the opportunity to partner with the state government on vehicles to achieve unlocking that ambition.

The second area is leadership from the Victorian government in policy reform, especially in the planning space. The current system is too slow, and during the time that planning amendments sit with the approval process new data and information on climate is released. The pace and scale of the transition required warrants prioritising planning reform and collaboration to achieve it. Urban planning needs to better respond dynamically to local level data and also to urban profiles and city contexts, which are unique from suburban or outlying areas. For example, an amendment relating to flood, specifically amendment C384, has taken two years, and the amendment on sustainable buildings, C376, has taken over four years. There is ripe opportunity to improve processes and lead the way which is data-driven in decision-making.

Finally, talking about social inequality with climate risk, housing quality is impacting on the resilience of our most vulnerable communities through extreme heat, health impacts, energy bills and exposure to mould and damp. Our community have also identified the need for local, culturally inclusive hubs that provide neighbourhood connection and disaster resilience. For example, at City of Melbourne we have been working in heat events to work with other service providers within the municipality to open up their areas during heat events to provide places of cool reprieve when it is very hot and people do not have access to air conditioning or cool places. The community have told us they want climate-ready and safe streets to provide a sense of place and belonging.

In closing, in our submission we have showcased specific examples that have the potential to build the resilience of infrastructure and communities. We have outlined that with secure funding and a cross-government approach we will have an enormous potential to build climate resilience.

The CHAIR: Thanks very much, Tiffany. Renae, I might start with you. You talked about the problem, or you had a recommendation, that we should have some sort of standardised risk assessment for climate impacts at a local level. I wonder if you can expand a little bit on that and talk to me about how this is done currently, what the deficiencies are, and what you think a better approach would look like and the impact it would have.

Renae LITTLEJOHN: [Zoom dropout]

The CHAIR: I might pause that and focus my attention on the people in the room while we try and figure that out. Tiffany, one of the things you mentioned in your evidence and in your submission was the need for better appreciation of the differences, particularly on water and stormwater, between urban renewal sites and greenfield sites. And the municipal urban stormwater institutional arrangements, it says in the submission, are largely developed for greenfield sites rather than renewal sites. We are going through a large process of urban renewal across inner Melbourne. What do you think a better approach would be to deal with the increasing risk of more floods arising from the more intense weather events that we are seeing?

Tiffany CRAWFORD: I think we need a more localised approach, with the state government understanding through this planning system that there are unique contexts in Melbourne, and I am not just talking about our municipality but the City of Port Phillip, Maribyrnong and others. It is a very different context, often retrofitting complicated infrastructure into existing places and dealing with assets that are ageing rather than providing new infrastructure into a greenfield site, which is a very different context.

The CHAIR: So the key difference here – I am just trying to understand the key difference – is that in urban renewal it is about the challenges of retrofitting existing infrastructure and making adjustments to them, whereas greenfields development is largely about the creation of new infrastructure and that the current guidelines or institutional arrangements do not appreciate that difference.

Tiffany CRAWFORD: That is right. That is correct. And also it is a much more complex endeavour to retrofit and to place it into existing urban infill sites than it is to place new infrastructure into a greenfields site where there is nothing there in terms of infrastructure to start with.

The CHAIR: How is that challenge manifesting itself in the City of Melbourne at the moment?

Tiffany CRAWFORD: It often means making difficult choices between projects – which projects we are able to fund, which ones on an ongoing basis we can invest in – and having to negotiate through complex governance arrangements with water authorities and state government and local government in order to progress projects. It just takes so long to deliver.

The CHAIR: You think that a more tailored set of arrangements would improve that?

Tiffany CRAWFORD: Absolutely. I am just trying to think through what my recommendations would be about what that would look like, and I would need to get back to the panel on that.

The CHAIR: We would be interested to hear that, because obviously this committee in particular is aware of the increased risk from flooding and we have had detailed evidence about the more intense nature of weather events, particularly rainfall, that we are likely to see, so we do need to respond. I just want to clarify something. Just in relation to the October 2022 floods and the new modelling from Melbourne Water, you said that the flood modelling is impacting on residents. Is the flood modelling impacting on residents or is the risk that the modelling is articulating impacting on residents?

Tiffany CRAWFORD: It is the risk. The communication of the flood modelling is impacting on residents, so you are right, it is both.

The CHAIR: But it is the risk as well.

Tiffany CRAWFORD: Yes, that is right. It is the risk.

The CHAIR: The modelling is only telling us that there is a risk there.

Tiffany CRAWFORD: Which has caught many residents by surprise.

The CHAIR: Sure. But the modelling itself is not the problem, it is the susceptibility of the area to the flood.

Tiffany CRAWFORD: Correct.

The CHAIR: I just thought it was important to clarify that. Renae, are we back on? No, we are not.

Melissa BURRAGE: I am happy to jump in, if need be.

The CHAIR: That would be great. Just quickly, if you are able to, that would be great, Melissa. Thanks.

Melissa BURRAGE: Sure. You might like to repeat the question. I am assuming it was associated with the risk.

The CHAIR: Yes, it was about risk. What I was interested in was the evidence that we should have a more standardised set of risk assessments. I am just trying to understand what the current state is and what the future state would be if we had that standardised risk assessment. What is the problem now, and how would it be better if we did something like that?

Melissa BURRAGE: I think fundamentally every area across Victoria is quite different, and there is not a standardised approach to actually look at the risk. Recently SECCCA, the South East Councils Climate Change Alliance, undertook a community resilience study and looked at certain elements associated with risk for our communities in the south-east region. However, that is a standardised approach that we used within our south-east councils area. Other areas of the state and other greenhouse alliances may choose a very different approach and different criteria to assess what is vulnerable and what is not and those economic and financial impacts. If the state were to actually develop a standardised approach, then we could see some consistency for actually comparing data and providing some ability to actually prioritise and assess the need associated with that in a very equitable fashion.

The CHAIR: Thanks very much. I appreciate that.

Melissa BURRAGE: Does that help you?

The CHAIR: That is helpful. Thank you. Mr Ettershank.

David ETTERS HANK: Thank you, Chair. Thank you both for your submissions. They are terrific. Tiffany, could I ask you: if we think about the built environment climate change adaptation action plan of the state government, has there been much direct engagement with the government and particularly with DEECA or DTP over the rollout of that action plan with the City of Melbourne?

Tiffany CRAWFORD: I will take that on notice. We do have frequent interaction with the department. We have our own adaptation plans. We have our own implementation arrangements within the city, so I am not directly familiar with that, if that answers your question. But I can find out.

David ETTERS HANK: That would be appreciated if you would take that on notice. Under that plan obviously there is a set of seven priorities, so I am very curious as to the degree to which City of Melbourne has been directly engaged with government on that plan. In your submission you talked about the delays associated with planning scheme amendments. Could you just elaborate a little bit on the nature of those amendments and what the delays have meant, please?

Tiffany CRAWFORD: Certainly. I will talk first to the planning scheme that has taken the longest, C376. This was really innovative at the time. It has taken some time, so perhaps it is considered less innovative now and more business as usual. This is really around ensuring that we are delivering a city, which I spoke about in my submission, so that all new and retrofit buildings of a certain size incorporate the necessary infrastructure to deliver a climate-ready future. That might include green infrastructure, green roofs, green walls and cooling mechanisms. We are also ensuring that the latest – or not even the latest but that developers are required to deliver a certain standard of building in the city. Planning takes time, I understand. It is a complex system. What that then means is that there has been a lot of discussion in the city context – the planners are aware of it; the developers are aware of it – but the pathway means that we are unable to progress and that developments are continuing to be approved that are not necessarily caught by the requirements of this new planning scheme provision. It is the same for C384 in relation to urban development and flooding. The delays mean that we are unable to take advantage of the mechanisms that we know will make a difference to climate change in the city, and I suppose, to be frank, from a decision-making perspective that can be frustrating when we know there are methodologies that could be used that are going to make a difference but the delay means we are unable to move ahead with them.

David ETTERS HANK: I think adding to that would probably be the Macauley structure plan, which covers Kensington Banks, which was flooded. I think it has been three years or something since it went into government.

Tiffany CRAWFORD: That is right.

David ETTERS HANK: Do you get any feedback from the Department of Transport and Planning or DEECA as to why there would be such delays with those planning scheme amendments?

Tiffany CRAWFORD: There are, I believe, various reasons. I am not always the one having those communications, and I am unable to talk to the reasons for those. That would be a matter for the department and the minister's office.

David ETTERS HANK: We will be asking that, but perhaps I could ask you to take that on notice. If it means that you need to talk with planning within City of Melbourne or suchlike, it would be greatly appreciated to try and understand why those delays were just so extreme from the City of Melbourne perspective. We will be talking to DEECA this afternoon.

Tiffany CRAWFORD: Sure. Noted.

David ETTERS HANK: Okay. Thank you very much. With my 7 seconds, I will yield, Chair.

The CHAIR: Generosity knows no bounds, Mr Ettershank. Ms Lovell.

Wendy LOVELL: Tiffany, hi. You spoke about working with people in the city to open up some of their spaces for cooler places in the summer, and I noticed also you talked here about ensuring that social housing is upgraded to make sure they are safe and they are cool et cetera. But no matter how much heating or cooling we put into whether it is social housing or private housing, we cannot force people to turn it on. The reality is that there are a lot of people just not turning on their heaters or not turning on their air conditioners because of the cost of energy. I am just wondering if you could expand on what it looks like – that work you are doing with the private sector to open their cooler places and spaces – and also what spaces the council are actually opening up also for residents on extreme heat and even extreme cold days.

Tiffany CRAWFORD: Certainly. I will take the second question first. We have looked at our own assets to see how we make those work harder in periods of intense heat. We have opened up our newer narm ngarrgu library. We have looked to extend the opening hours, and that has been really successful. We have seen a lot of particularly students coming and using the space, not just for study or for reading but for other reasons like escaping the heat. However, there are challenges in opening up those facilities, and that comes down to being able to flex up the workforce in those periods without a lot of notice and then of course having the resources to do that. It sounds really straightforward and simple, but in practice it is quite challenging to do.

We have also been able to use a very small amount of grant funds to work with community providers within the municipality to open up their facilities, particularly in the hot periods from the afternoon through to the evening when people are particularly vulnerable to heat in Melbourne, and then communicating about that through the media, through social media and through other channels to ensure that the community are aware that they could access those places, and then providing cool kits, water and information about heat – there are a lot of people who use the city or reside in the city that may not know what the best action to do in a heat event is, so ensuring that they are aware of how to care for themselves or others and those that are more vulnerable in their care.

Wendy LOVELL: Have you done any work on auditing the elderly people in the community, for instance, to make sure that they are actually aware of all of this as well? Because they may not have access to social media and they are the ones that are most vulnerable.

Tiffany CRAWFORD: Not necessarily auditing.

Wendy LOVELL: Or identify where they are.

Tiffany CRAWFORD: We do not always have access to that data, but it is interesting that the Mornington Peninsula have all so talked about that data and having access to information. Certainly we have looked at the best communication channels that we can utilise, and yes, not everyone can access social media or does, so we are also looking at more traditional methods. How do we also talk to communities with languages other than English, using trusted people within those communities to talk to people. Really looking at that outreach is very important.

Wendy LOVELL: I apologise to Mornington Peninsula; I am not going to get time to do a question to them. Tree canopy – we are lucky in this city that when it was first planned in the 1800s we had large parks, but since then we have also gone about concreting over everything and building concrete buildings in the city. Is there any work going on to increase the tree canopy in the CBD or in the City of Melbourne?

Tiffany CRAWFORD: Yes, there is. The City of Melbourne had one of the first urban forest strategies in the world. It is applauded around the world. We have an ambition to increase our tree canopy by 40 per cent by 2040. We are at about 28 per cent, and now that work has slowed a little because finding areas to put in trees is becoming more challenging. We are really doing innovative work around how to work with the private sector to maximise places so that we can deliver that ambition of tree canopy, knowing that will significantly cool the city and provide shading and other ecosystem services. We have also done work around understanding what trees will survive in climate change in our context and how to diversify the urban forest. That is work that I would recommend to the committee. A lot of councils in inner urban and outer urban have accessed that, and we have been working across Melbourne on our urban forest work.

The CHAIR: Dr Mansfield.

Sarah MANSFIELD: Thank you. Thank you for appearing and for your submissions. I am interested that both councils have commented on the need for the planning system to be, I guess, more agile, particularly when

it comes to incorporating the best available science and contemporary information that is relevant to the local context. I am wondering if you have any suggestions about what structural changes could be made in the planning system to enable that to occur. That may or may not be something you can answer on the spot, but I would just be interested in whether there are some simple things, based on the experiences you have had, that you think could change around the planning system to enable that to occur?

Tiffany CRAWFORD: Ultimately, if changes that were focused on climate resilience were able to be taken out of the traditional methodology that slows down the planning system, that would be optimum, but that comes at a cost in terms of process. The ministerial approval process can be very slow. That is what really slowed things down in C387. That was very difficult, I think, for the council, in that we had considered it and the council had the community endorsement to proceed, but ultimately the state took some time to approve us to move ahead with that amendment. That is something that can be considered. We are working in a very traditional system. As we have said, the speed and agility are not there to keep pace.

Melissa BURRAGE: I might add to that, if that is okay. I am not sure if you remember, but a couple of years ago there was en masse change to stormwater management that was made through the planning scheme. That was made very, very nimbly and came across very quickly and was introduced because of the urgency in the need to apply that. I think that is what we need to see with some of these other planning changes. So they are en masse changes, and then obviously there will need to be some tweaks for localised areas to just modify for different regions that en masse approach. However, given the urgency of some of these initiatives, and indeed preparing our community for these impacts, particularly when we are talking about flood overlays – and we are experiencing the same thing, we know that once our flood mapping data is indeed working through the planning scheme amendment process it will already be out of date. The science is already changing before we have even completed each of the flood maps.

To give you an example of that, we are due to complete the flood mapping for our whole region, but we already know the annual rainfall run-off data is changing. It is too late to apply that now, but we would like to see that blend in. Those changes are quite radical. So something that was potentially a one-in-100-year event is going to become a one-in-five-year event. They are radical changes. We need to actually see these changes get introduced at a much faster pace. If we introduce them en masse and then tweak and back pedal and tweak to the refinements, then we are going to get a much better outcome for our community than indeed just going slow and steady, ‘Let’s get it right for every region as we go.’ We are just not seeing the nimbleness that needs to occur here, and the urgency for our community.

Tiffany CRAWFORD: Could I add to that? That is an excellent recommendation from Melissa, and I completely agree, However I would like to recommend that the context for cities is strongly considered. Because otherwise it is possible we will end up with a planning system or change, if we do look at that en masse change, that is contextualised for a more suburban/outer area without thinking about the urban infill area, which is very different and has its own set of challenges. So I would urge the committee to consider that in its recommendations.

The CHAIR: Mr Berger.

John BERGER: Thank you, Chair. Thank you all for your appearance this morning. Tiffany, I will give you a break. I think being in front of everybody you get the most questions, so I will go to the people on the screen, if I could. I am just interested to know what measures taken for climate change or climate resilience have been most successful for you?

Melissa BURRAGE: Could I ask you to just expand on that a little bit? In what way?

John BERGER: Any measures that you have taken for climate resilience in your particular areas. What has been the most successful?

Melissa BURRAGE: I think this is a work in progress, so I might ask Andrew to respond to our community resilience element and very much getting our community prepared as there has been extensive work in that space. The education and the preparedness are key simply because our infrastructure cannot keep up with the pace of the change. AJ, would you like to expand on that?

Andrew JOSEPH: Thanks, Mel. I can provide an example of a program that we are running currently in Redhill and Main Ridge, which has been impacted significantly by storm events and has high fire risk as well. That community was successful with a Safer Together grant, which enabled a worker to work exclusively with that community about building their resilience. In essence for us the best benefit is working at a local level with almost a township base, because I guess there are nuances around what works best for them at a local level. This project has about 20 local community members that are being educated on their local risks and, more importantly, about how they manage that individually and at the community level.

Two weeks ago we facilitated an exercise at the local football pavilion, which can be used as a community relief hub, and that community basically worked through a storm scenario and how they would respond and support each other in the first 72 hours on the basis that formalised support such as ourselves, council, cannot actually get up there to support them. It is really about empowering community to be able to make decisions for themselves, ensuring that they are aware of their risk, what they need to do, how they support each other; being aware of the vulnerabilities in their community, being that older population, people with a disability; how they get information to each other. Some of the issues that have been already shared are around telecommunications – whenever there is a power outage the telecommunication also goes down – so how they can ensure that messages get to their local community members if they cannot use their phones or the internet. So there are some really great examples of programs that have been delivered, but I guess it is inconsistent; it is not in every township, just because we have not got the capacity or the funding to do so. We have had that one opportunity through funding to do that in that township of Redhill. That is one example of some great work that is happening.

John BERGER: Thanks, Andrew. I just wondered: through those community consultations, have there been any key themes amongst the group that you could identify to put together a standard that might work across the board?

Andrew JOSEPH: I think it is about ensuring that the community is very aware of their risk. What we have identified – and this might be unique to the Mornington Peninsula – is that we have obviously high rates of tourism, so we have a lot of short-stay accommodation. We have a community that comes to these areas that are beautiful but obviously higher risk. So for our community that is something they are very cognisant of – how do they get the messages out to visitors that come to our beautiful municipality so that they are aware of those risks and they are able to be informed about what they can do if there is an emergency, as an example. I guess that is one thing that is really front of mind for our community and also just ensuring that that information is shared with some of our more vulnerable community members that are a bit more isolated and may not have the means for technology where you might get that information – say through Facebook or the like.

John BERGER: I have got 30 seconds. I was just wondering: was there a priority out of any of them or any of the issues brought forward that the community groups would want to see addressed first?

Andrew JOSEPH: For them in particular, as I said, just ensuring the telecommunications in this community is their biggest priority. When the storm event happened in 2021 they were isolated. We, council, did not get any of that information off Redhill because the telco towers were down. So that is the biggest priority for them, to have backup power for our telco towers.

John BERGER: Thanks, Andrew.

The CHAIR: Thanks.

Melissa BURRAGE: Can I just add to that? Another element of that has also been actually having energy supply. As much as possible we are trying to transition our community to renewable energy, but also one of our community energy groups has actually been the first in Australia to establish a council-owned community battery, in Flinders, and they are very keen to see more and more of those batteries rolled out across the peninsula so that they do have consistent energy supply. Our energy-resilient buildings also have battery backup, so they have somewhere to go where they can recharge their phones and communicate with other areas across the peninsula and beyond.

The CHAIR: Thanks, Ms Burrage. Mrs Broad.

Gaelle BROAD: Thank you very much for attending today and contributing to the inquiry with your submissions as well. I am just interested: Mornington council, you mention in your submission proposing a statewide rollout of the CFA schools in fire country program in high bushfire risk areas to educate primary school students about the risks of bushfire and build the capacity of students. And you talk about families and local community, so I am just interested if you could share more about that program and what you saw with the pilot program at Harkaway Primary School.

Andrew JOSEPH: Thank you. We were really pleased to see that that program had been developed and implemented in Harkaway. For us it is about ensuring that, I guess, capacity building and disaster resilience is at a very early age, that young people, children, are also aware of the risk. What we heard through that pilot program was that the children felt empowered, they were able to then have conversations with their parents, with their grandparents and sort of change the narrative that it is an adult issue, and that they could also be part of the solution and they can encourage their parents to maybe look at solar or encourage their parents to put in a fire escape plan. So for us on the Mornington Peninsula, we felt that that was a really exciting opportunity to potentially roll out across the state. I think at the moment it is only Harkaway that have had that opportunity, but, for example, in Red Hill, that school up there has a really strong appetite for bringing students along that journey and educating them so that they are aware of the risk and they can then empower others in their community, such as their parents, grandparents and those around them, to be aware of the risk and be able to manage it themselves.

Gaelle BROAD: So how did the program itself work? How long did it go for? Did you have CFA attend? Was it written materials?

Andrew JOSEPH: Correct. It is a program that is through the CFA education unit. We were just observers. We had an opportunity to go and view it. My understanding is it is a class-based program that is run for a term. It is externally facilitated by a CFA educator, and they run it in the class. They actually go out and do field trips, they go into bush settings and look at the local risk, look at different escape plans and are obviously very informed about their local community and what they need to do to ensure that they are aware of those risks and how they manage them.

Gaelle BROAD: Thank you. I am just interested, I guess community awareness is certainly something that you have both mentioned as well. I was at Barmah yesterday, and I know Wendy Lovell was there as well. They were talking about sandbagging and just how still residents do not how to sandbag properly. Now, I am just interested because Melbourne is kind of a flood zone as well. Just with the community awareness campaigns, you mentioned sort of social media, but what kinds of material are you using to educate people? Do you see that as the local council's role, because I know SES also has material that gives instructions on how to sandbag correctly, but can you just talk to that and how you are trying to raise community awareness?

Tiffany CRAWFORD: In my knowledge, and I can check this, I have never seen us talk about or educate the community about sandbagging. That is an SES function. It is an interesting future development that we can look at, but certainly talking to the community about their risk awareness and really that localised approach so that they are aware of the information that is coming out through that flood modelling change and then probably looking more to the medium and longer term around how they improve the resilience of their properties is the role that the council is playing within community. So I think probably in that shorter term to immediate that function has traditionally been played, but I can see that local government is going to have to move into that space.

Gaelle BROAD: And, Mornington, do you have anything to add?

Melissa BURRAGE: Yes. We have actually got a program through our stormwater management area that is working in collaboration with Melbourne Uni and Melbourne Water, and that program is really looking at floor levels, trying to identify those homes that are at risk associated with their floor level and then working with the residents to say, 'Rather than necessarily sandbagging, in preparedness you might want to move your furniture upstairs, you might want to look at moving all your power points to a higher point in your home' and those sorts of things. So it is really actually working in front of the storm events and the flood inundation to actually make their homes more resilient to this, and then sandbags really are the last resort. But the more that we can do in preparedness is where we are trying to work.

The CHAIR: Ms Bath.

Melina BATH: Thank you, Chair. Thank you, Tiffany, and thank you, Renae and Melissa and Andrew for being here today. My question is to Mornington initially. Renae mentioned 10 per cent of Victoria's coastline, she mentioned coastal erosion and storm surges and increased tidal surges and mentioned also the cost of inaction in relation to short-, medium- and long-term impacts on infrastructure. Question: what is most at risk in the built environment in the Mornington shire in terms of coastal erosion, and what support do you need from state government in addressing and mitigating those impacts?

Melissa BURRAGE: Thank you for your question. That is a big question. You are absolutely right: with so much of Victoria's coast, we are very much at risk. We have a lot of built infrastructure. All of our community lives along our coasts predominantly, and much of that is actually low lying as well. We obviously have quite a significant proportion of our community that is at risk with sea level rise and erosion taking place. There was recently a VMAC report, so Victorian Marine and Coastal Council report, that actually says one dollar spent now is \$10 in the future. So what we invest now will save us in the future. I can share my screen. I actually have a graph that shows this.

Visual presentation.

Melissa BURRAGE: Something I have prepared earlier. This is actually showing the economic base case around addressing the risk here. What we spend now in the short term – and when you look at the erosion, storm tide and permanent inundation here, you can see this is an exponential graph here. What we do now is going to make an enormous difference to our economic sustainability in the future. I will stop sharing because you know what an exponential graph looks like.

What we invest now will prepare us better for the future. When we look at some of the challenges on our coastline, obviously there is the built infrastructure, both coastal infrastructure and the homes – everybody wants to live with a coastal view, right? – but then there is also other infrastructure just as access to the coastline, so our coastal paths and our coastal stairways. You may have seen our beach boxes were heavily affected more recently in the storm just a couple of months ago where we were seeing those beach boxes subject to significant damage in a storm and storm surges associated with that. We are also seeing landslides. Beleura Cliff Path, a very amazing path with absolutely gorgeous views across Port Phillip Bay – it is going to take many millions to rectify that path, and it has now been closed for a couple of years. We have got stairways that are collapsing, and we are having to close those stairways just due to erosion and the safety of those stairs, because the footings are being washed away. Yes, it is ongoing, the list.

Melina BATH: Thank you. I might just say to Tiffany: if you do not mind taking this on notice, you can provide the same context in terms of Melbourne city and its coastal erosion? In relation to adaptation and protection, does Mornington shire have a position on adaptation and protection as opposed to retreat? I know each coastal area is slightly different, but does Mornington have a position on that? How could we adapt and protect rather than retreat?

Melissa BURRAGE: Yes, so it really comes down to dollars. Mornington Peninsula Shire is currently developing Our Coast Our Future, which is a coastal strategy, and that is looking at our entire coastline. We have mapped the hazards associated with our entire coastline, so 192 kilometres, and indeed are then looking at developing adaptation plans for the priority 11 townships on that coastline. Individually, we will look at each township around what the strategy is, what we want to protect, what we want to enhance and what we want to actually let go to natural dynamics. In some cases that does indeed incur that retreat, which is almost a dirty word to our community, because they do not want to see that.

Melina BATH: Chair, just finally, I know my time has run out. Do you want to provide some portion of that document to the committee, if that is available now? Or is it still in its infancy?

Melissa BURRAGE: Yes. All of our hazard mapping is available, and there are 11 townships that we have nominated.

Melina BATH: Great. And thank you to Melbourne, if you would not mind providing that. We have run out of time for me.

The CHAIR: Renae, Melissa, Andrew and Tiffany, thanks so much for appearing today and providing us with that evidence. You will all be provided with a copy of the transcript to review before it is made public.

Witnesses withdrew.