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**HOUSE OF
REPRESENTATIVES**

STANDING COMMITTEE ON CLIMATE CHANGE, WATER,
ENVIRONMENT AND THE ARTS

Reference: Climate change and environmental impacts on coastal communities

THURSDAY, 21 MAY 2009

MELBOURNE

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**HOUSE OF REPRESENTATIVES STANDING COMMITTEE
ON CLIMATE CHANGE, WATER, ENVIRONMENT AND THE ARTS**

Thursday, 21 May 2009

Members: Ms George (*Chair*), Dr Washer (*Deputy Chair*), Mr John Cobb, Mrs D’Ath, Mr Dreyfus, Mrs Irwin, Ms Livermore, Mr Scott, Mr Wood and Mr Zappia

Members in attendance: Mr Dreyfus, Ms George, Mrs Irwin, Dr Washer and Mr Zappia

Terms of reference for the inquiry:

To inquire into and report on:

Climate change and environmental impacts on coastal communities. The committee will inquire into and report on issues related to climate change and environmental pressures experienced by Australian coastal areas, particularly in the context of coastal population growth. The inquiry will have particular regard to:

- existing policies and programs related to coastal zone management, taking in the catchment-coast-ocean continuum
- the environmental impacts of coastal population growth and mechanisms to promote sustainable use of coastal resources
- the impact of climate change on coastal areas and strategies to deal with climate change adaptation, particularly in response to projected sea level rise
- mechanisms to promote sustainable coastal communities
- governance and institutional arrangements for the coastal zone.

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Committee met at 9.21 am

CHAIR (Ms George)—Welcome. I now declare open this public hearing of the House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts. The committee is inquiring into climate change and environmental impacts on coastal communities. The Minister for the Environment, Heritage and the Arts and the Minister for Climate Change and Water have asked our committee to examine the environmental impacts of coastal population growth, as well as the impact of climate change, on coastal areas, and strategies to deal with climate change adaptation, particularly in response to projected sea level rise. The committee will also look at existing policies and programs related to coastal zone management, mechanisms to promote sustainable coastal communities and governance arrangements for the coastal zone.

[9.22 am]

FULLER, Dr Robert James, Member, Global Warming Group Queenscliffe

CHAIR—I would now like to welcome the representative from the Global Warming Group Queenscliffe to our public hearing. Although the committee, Dr Fuller, does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. In that regard, the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The committee has received the submission from the Global Warming Group and it has been authorised for publication. We would now like to invite you to make a brief opening statement before we proceed to questions and discussion.

Dr Fuller—Thank you very much, ladies and gentlemen of the committee. I gather I have only got three to five minutes. I was going to give you a brief recap of my submission, but I am not going to do that because I am going to assume that you have read it. I come from the smallest borough, I think, in the state of Victoria—only two towns. It is an iconic and beautiful place. If you have not been there, I strongly recommend that you do. But because of our location we are severely threatened by climate change. We are almost totally surrounded by water. In our submission we have laid out quite clearly the areas of threat to us, in coastal erosion, sea level rise, fauna and flora. There are a couple of other things that we did not put in, like rise of the mosquito population, which is quite high down there.

I thought I would use the rest of my time in my introduction to give you an update of what has happened since I wrote the submission, which was over a year ago, both the good and the bad news. We will start with the bad news first of all. The bad news is that the projections that we used in the submission for sea level rise, we now know on best scientific evidence, are likely to be higher. The 0.88 of a metre sea level rise is now seen to be a minimum. You will see in the submission that people who have done investigations show that, with rises of a metre and thereabouts, we are going to lose some islands down there. They are not populated islands, but they are part of the landscape and the geography. Of course, it is going to have a huge impact on our intertidal zones. We are one of only 66 Ramsar sites in Australia down there. The wading birds are going to lose habitat and things like that.

We had a graphic example last Saturday night of what happens when you get king tides and storm surges. I have got a couple of images, which I will hold up to you. That is on the foreshore of Point Lonsdale. I can pass those up if you like.

Mr DREYFUS—That is the quiet bay beach, isn't it?

Dr Fuller—That is right. These are a couple of pictures that were taken the day after, showing some of the damage that took place. You can see in this image here that some of the seawall has been knocked off and, of course, it has been laid at the front there to get it out of the way, but that is the extent of it. This shows you some of the dunal systems, because we have got a very important dunal system down there. This is the area that I mentioned in the submission where the community has been replanting to try and stabilise the dunes. We have got another planting

in June, with which you are welcome to come down and help. You can see the extent of the damage that took place. We had a graphic reminder last Saturday night of what this means to us. It is not just a theoretical little argument that is going on at political levels. It is real for us.

Mrs IRWIN—Dr Fuller, can we keep those photos for our records?

Dr Fuller—Yes, of course. That is the bad news: that we now know that sea level rise, that we thought was the worst scenario, is going to be higher than projected, and we are daily reminded of what can happen.

I will finish with the good news. It is a good place to end. The community continues to take action. I mentioned the fact that we have got another community planting along those dunes next month. Our climate change group, in conjunction with council, is running a big expo later in the year. That is a three-day expo to try and get people to take action to save water and to save energy. We have got a ‘food miles’ dinner and all sorts of activities to try and raise the level of awareness in the community. It would be wrong to say that every member of the community is fully engaged in this, because it is certainly not the case, but we have a significant number—enough to run these kinds of events. That is part of the good news. The other part of the good news from our perspective is that council has very much come on board now. It is now part of the draft plan that has come out from council.

CHAIR—Which council is this, Dr Fuller?

Dr Fuller—Sorry. This is the Borough of Queenscliffe council. It is the smallest borough council in the state. It covers only two towns. We survived all the amalgamations. They are now really behind this. They have joined up to ICLEI. We have had our first audit in and now we are in the process of taking steps. In the draft plan that has just come out, one of the aims that have been stated is that we are going to move to carbon neutrality as a borough and that we are going to advocate actions to mitigate and stop increased climate change. Those are the good news points, and I will finish on that.

CHAIR—Thank you, Dr Fuller. Full marks to you and your community group for taking this on in a very proactive role. Sometimes communities govern thinking on issues, so it is a good case study for our committee. You say in your submission:

Mitigation ... in the BoQ can only be undertaken if the Federal Government works with and supports our local council.

I am from interstate, so I do not know the full ramifications of the size of your borough, but I guess it is a fairly small local government authority—

Dr Fuller—Very, yes.

CHAIR—with relatively small staffing levels, and maybe not the expertise within the council to deal with this on their own. Has the council at any stage applied for funding which is available from the federal government to do studies of adaptation to climate change? There are some federal grants that are available.

Dr Fuller—Yes, it has done. I think it was awarded \$30,000 last year for a study. I am not quite across the details of what they are doing with that money, but they did get some funding under a scheme that was in operation last year. I do not know whether that is still the case.

CHAIR—In terms of access to state funding, have you had any assistance from the state government?

Dr Fuller—Not to my knowledge, no.

CHAIR—I understand from the submissions that we heard yesterday that, in terms of the structural arrangements, you have a regional council board. Which one would cover your area?

Dr Fuller—I am not so sure about that. I presume it might be the Surf Coast or the City of Greater Geelong. We are 36 kilometres from Geelong, which is the second-biggest population centre in the state, so I would not be surprised if it comes under that board.

CHAIR—I got the impression, reading your submission, that you are feeling a little bit alone in Queenscliff to take on these very significant challenges. Your photographs indicated the vulnerability already of the township.

Dr Fuller—Yes. Two of our active counsellors do engage with counsellors along the shire coast and there are other active councils along there that have taken steps, for instance, to join up with ICLEI and things like that. But going back to the size of our community, we are a very small community and we have limited funds. It is largely a ratepayer based sort of funding. That is where the money for council comes from. In the submission I talk about the fact that there has been a very detailed study done by CSIRO of the Gippsland coast. It led to all sorts of recommendations about housing developments down there and things like that. I am not a member of council but I am sure it would be totally beyond our capacity to do that.

I also think that the protection of the coastal zones is not something that needs to be left to individual councils. I do not know where the help is going to come from but it should not be left to local councils or even state governments which have limited powers around coastal areas. I really think it is a federal responsibility.

CHAIR—Even though constitutionally the federal government does not have any authority in terms of planning and land use regimes?

Dr Fuller—One of the things I mentioned in the submission was related more to the aspect of sustainable communities. I mentioned overdevelopment and I am sure you have heard that in other submissions from coastal towns. We face a massive development proposal at the moment. That is going to be built on a partial piece of wetland that is not Ramsar listed. We currently have a submission in to the federal minister to declare that little extra piece of wetland part of the Ramsar listing. There are ways sometimes in which the federal government might be able to intervene to stop inappropriate developments.

Just to give you a feeling for the response of the community to this, we surveyed all the houses, or all the people who were there anyway. Something like 1,200 out of 1,700 houses that were doorknocked were opposed to this development. The community raised \$100,000 to fight

and to make an appeal at the environmental impact statement hearing. We lost, but we have not given up, because this is what is happening in communities. We are battling inappropriate developments which have some impacts on sustainability particularly. We are very remote. This is being built on a partial wetland. I do not know how long this can go on.

CHAIR—Does your council take comfort from the newly announced policy of the Victorian state government, particularly in relation to the impacts of sea level rise?

Dr Fuller—Not particularly, no.

CHAIR—Why do you say that?

Dr Fuller—Because the minister has said it is all about jobs and he has given the approval for this.

CHAIR—So the minister called in this particular development?

Dr Fuller—I do not think he called this one in. His deliberation came just before he called in a number of other projects around the state. Quite clearly it was driven by the current financial situation, because the second line is, 'It's all about jobs, jobs, jobs.' There are going to be 8,000 temporary jobs building these 700 dwellings on a piece of wetland in a community that only has 3,000 to start with. This is going to have a massive impact. As I say in the submission, it is not just about building houses. It is where they are built and how people are going to move around.

We have five bus services a day to Geelong. We have three at the weekend. The last one leaves at five o'clock from Geelong to get back. These are communities that are not like mainstream urban developments and, to put 700 homes in an area like that, in which direction is that pushing us? It encourages the use of cars. Every house has 1.5 cars, or something. All this is going to add to climate change. It is last century's thinking, isn't it? We have to think in a different way about moving people around and where people live et cetera.

Dr WASHER—Thanks for a good presentation. It sounds a little odd because you have 590 houses, you said here, and 170 retirement units, but basically you seem fairly isolated, a long way out, and with very little public transport. Where are the job opportunities for these people when the buildings are completed anyway?

Dr Fuller—Good question. A third of our population is over 60. We have the oldest demographic in the state, so it is seen as a place where people like to retire. These are temporary jobs that are going to come about in the building of the homes, but it is not thought through in that sort of way. We certainly do not have the jobs in the Borough of Queenscliffe, so that means people are going to be forced, if they are in the working population, to move into Geelong or beyond that.

Dr WASHER—The other thing that you did not write in here but mentioned in your introduction was the mosquito problem. We have that a bit in the west, particularly at Mandurah and places like that that you may not have heard of. But that is a problem. Have you noticed increasing disease problems, whether they are Ross River, Barmah Forest or other illnesses, because of that?

Dr Fuller—No, we have not had any of those, but it seems to be a bit under control at the moment. We have had the famous Bairnsdale ulcer. I do not know whether you have heard of that? They think the mosquito is one of the vectors for that. It is where you get a bite, then you get a sore or an ulcer on your leg or part of the skin and it just does not heal up, and you have to have it cut out in the end. There is an extensive spraying program to try and keep the mosquitoes under control, but it is very dependent on climatic conditions. You can have a good year and it is probably a combination of the spraying and the climate. But, as we know, the climate is going to be more favourable to the breeding of things like mosquitoes. As far as I can see, it is going to mean an increased use of spraying and it is all the wrong direction. We should not be doing those things in the first place.

Mr DREYFUS—Dr Fuller, for the assistance of the committee, the Borough of Queenscliffe, as you have pointed out, is the smallest of Victoria's local government areas.

Dr Fuller—Yes.

Mr DREYFUS—It achieved that status by being left out of the council amalgamations that took place in 1996.

Dr Fuller—Yes.

Mr DREYFUS—It has been the case that some eight other councils in the Geelong area were amalgamated quite early in the life of the Kennett government to become the City of Greater Geelong, as I recall, as early as November-December 1992. Does the small size, Dr Fuller, of the Borough of Queenscliffe cause problems in formulating a response for the Borough of Queenscliffe to climate change issues?

Dr Fuller—No, I would not have said so. One of the advantages of being in a small community is that you can make changes quite quickly. One of the great things about having five councillors—we have just lost two councillors in the VC deliberations, so we now have five councillors—is that many of us know the councillors. We pass them in the street all the time. We can pick up the telephone and speak to them. That is a great advantage. I am quite a big supporter of small government, not these large boroughs where people do not know their councillors at all.

Financially, one might say, yes, we might be a little bit disadvantaged. But I think the response on fighting the overdevelopment is an example of a community that puts its money where its mouth is. We have a very educated community. We have a much higher tertiary educated community because of the number of retirees. In the instance of the Stockland development, this is on a piece of land that is controlled by the City of Greater Geelong. The boundary of the City of Greater Geelong and Queenscliffe is on a road. On one side of the road people are in the Borough of Queenscliffe and on the other side they are in the City of Greater Geelong.

One of our big objections to this development is that the decision has been taken by the councillors in the City of Greater Geelong to put up the EIS and to basically approve the development, but we are the people who are going to have all the impact, not just in terms of the issues that we are talking about, but particularly socially, to have potentially 700 new homes occupied in a tiny town where we have one health service with a limited number of medical

facilities. We have got parking issues. All the infrastructure is going to be overloaded by these new arrivals and it is a decision that has been taken by a council that is 36 kilometres away. That is where it is based. Obviously I could think of ways in which you could get around that problem, if we were given jurisdiction of that piece of land, but then we would not be where we are now.

Mr DREYFUS—My question was a bit more directed, however, at the resources that are available to the Borough of Queenscliffe, which has got quite a small staff, and whether you think that it has been possible for the Borough of Queenscliffe as a local government body to carry out necessary research, formulate appropriate responses and deal with the challenges presented by climate change. In answering that, if you could also consider and answer whether or not the Borough of Queenscliffe would be assisted by more assistance from the state government, more assistance from the Central Coastal Board or more assistance from the federal government.

Dr Fuller—That is undoubtedly the case. We would be assisted if that assistance was available. But to answer your question whether we have been impeded by our size, that is a little bit hard to say. The previous council, I think it would be fair to say, was not exactly enthusiastic about these issues. When we initially tried to get them to sign up to ICLEI it was just kind of dismissed. We then had a public meeting at which Dr Barrie Pittock spoke. We had 200 people turn up. We were pulling chairs out of the church so that people could sit down. We were so amazed at the number of people that turned up. With the subsequent application to join ICLEI, funnily enough, the council said, ‘Yes, we’ll sign up to that.’

So it is a little bit hard to say whether we have been impeded, because some of the problems have been in the past. Now we have a council that is not perfect, but it is much more proactive. It has taken these steps to include these things in the draft plan. It has sanctioned the employment of an environment officer. It has reconstituted environmental committees, which were allowed to disappear under the last council. So now we have a portfolio reference group that advises council on sustainability and the environment, as we do in the four other portfolio areas. I am reasonably optimistic that we now have a council that is listening and is proactive, but I would still say that financially we could use assistance, obviously. I am sure everybody says that.

Mr DREYFUS—You mentioned in the submission the need for water levels in Swan Bay to be measured and recorded in a systematic way. Is that now occurring?

Dr Fuller—Not as far as I know. The Department of Primary Industries has been relocated. It has got a new building that is actually on Swan Bay and as far as I know they are not measuring water levels in a systematic way. The other issue for us with monitoring would be the intertidal zones, because those are going to be affected. That would be very valuable baseline data information to collect on a very important piece of our marine national park. We have stated how important Swan Bay is to the whole health of Port Phillip Bay.

Mr ZAPPIA—Dr Fuller, on those photos I notice that there are some houses up on the cliff. Could you tell me when they were built? How long have they been there?

Dr Fuller—Not offhand, no. They are certainly not some of the oldest houses along that seafront there. That is Point Lonsdale and normally you would not have thought that that was an

area that was particularly threatened, because it is sort of like three levels. There is the beach level, then there is a raised seawall on which people promenade along, then you have to go up some steps to get to the shopping area. Anecdotally I will tell you something. On Saturday when this was happening, apparently one of the people who owns the cafe there said they thought that the water was going to come into the cafe, so it was going to go up from the beach level, across the wall and up onto the street. But of the areas of Point Lonsdale, if you were a visitor you would not have said—I would not have said—that that is one of the most vulnerable areas. We have got much more vulnerable areas. As I tried to show in the submission, there are houses down on what is called Fisherman's Flat where the old harbour was, and they are extremely low.

Mr ZAPPIA—Have any of those homes been constructed in recent times; perhaps in the last decade?

Dr Fuller—No, not to my knowledge.

Mr ZAPPIA—Are you aware that the state government has developed a coast strategy for development? Has the proposed development of all those homes that you refer to in your submission been approved or is it subject to that strategy?

Dr Fuller—It has been approved by the minister. It has had to go back to the City of Geelong. I am not totally sure of the process but I think they have final sign-off on it. One of the stipulations from the minister was in terms of building height which took climate change into account, but what that is going to mean is that not only are they bulldozing dunes in the area where it is built, but they are having to introduce fill in order to raise the houses to the appropriate level stipulated by the minister. That is environmentally disastrous sort of stuff to do on an area which is basically a thoroughfare for fauna from one wetland precinct to another. You are introducing introduced vegetation and things like that.

Mr ZAPPIA—Just for my benefit, and you may or may not be able to answer this, was the approval subsequent to the adoption of that coastal strategy by the state government?

Dr Fuller—When you refer to the coastal strategy, are you referring to the Victorian Coastal Strategy document?

Mr ZAPPIA—Yes, of 2008.

Dr Fuller—Yes, the one that has just come out. I think that was subsequent to that because we had quite a lot of disagreement with their interpretation of canal systems. This proposed development has a canal waterway system and that is going to eventually feed into the waters of Swan Bay.

One of our principal objections to this development is in terms of the environmental health of Swan Bay. You cannot build 700 homes with driveways, where people have cars, without motor oil, herbicides and things like that going into the water. If that water eventually finds its way into Swan Bay via another piece of water classified as not part of the Ramsar because it is just a small sort of cutting, that is just an excuse. They say, 'It's not a canal system and it's not feeding directly into Swan Bay.' But of course one piece of water is connected to the other piece. So the

Victorian Coastal Strategy came out before, as far as I know, and it said there should be no canal systems, but we have one coming as far as we are concerned.

Mr ZAPPIA—Thank you.

CHAIR—Have you pursued that issue—I think you made reference in your opening remarks—at the federal level?

Dr Fuller—What we have pursued is trying to get the minister to declare this particular area part of the Ramsar listing. That would, as far as I know, knock the development on its head because they would not be able to build on a Ramsar listed site.

CHAIR—But there might be scope to pursue the objection to the development.

Dr Fuller—Certainly. If it were Ramsar listed, yes.

CHAIR—But the proximity to the existing listed site—

Dr Fuller—Does not seem to cut much—

CHAIR—Have you pursued the issue federally?

Dr Fuller—I have not personally.

CHAIR—No, but the group?

Dr Fuller—We have another group that has been focused on this particular issue. They have had meetings with the minister, I believe.

CHAIR—I must say, during the course of our inquiry I have been concerned about what I would consider inappropriate developments abutting Ramsar listed sites. The whole issue of protection of Ramsar sites needs to be addressed in our report.

Dr Fuller—That is good to hear. This would be a classic example of where we are going backwards. We know we are losing wetlands all around the world, in Australia too. It is just the wrong place to build houses.

Mrs IRWIN—Let's go to some insurance and legal issues. In your submission on page 2 you have stated:

Home owners living on or below flood levels are likely to experience the effects of climate change financially through a decline in property values and increased insurance premiums.

Then I go to page 6. You mentioned earlier about houses on Fisherman's Flat being vulnerable to rises in Swan Bay water level. Looking at the picture that is in your submission, it looks like a home very close to the water, about 50 to 55 years old. The question is, where should the risks of liability lie if insurance is inadequate or nonexistent and who should be responsible for the associated compensation claims if significant damage eventuates? Should it be state, local or federal government?

Dr Fuller—I do not know whether I am qualified to answer that one.

CHAIR—I am wondering what your opinion might be.

Dr Fuller—My opinion? We did all sorts of things in the past when we did not know any better, didn't we?

Mrs IRWIN—Correct.

Dr Fuller—It is a hard one. To a certain extent, the individual has some responsibility, particularly if they go and buy a house in an area which in the future is going to be subjected to climate change and the insurance premiums are going to go up to cover that. There is some level of responsibility there. I also think, where everybody is a ratepayer and we are in communities, that we have some right to expect some support from local councils and from governments. It is not a very adequate answer, I am afraid. There are lots of people wrestling with this: whose responsibility is it? It is much more clear-cut if you are building in a new area, but not in existing places. That is difficult. Sorry if I have not answered your question.

CHAIR—Thank you. I am just looking at the time. Dr Fuller, thank you very much for attending our hearing today.

Dr Fuller—My pleasure.

CHAIR—Thank you also for the written submission. It does give us a good perspective about the challenges facing small local government authorities, or boroughs in the case of Victoria. We will send you a copy of the transcript for any corrections that you would like to make, and if there is any other material you have indicated today that you would forward, we would appreciate it if you could do that as soon as possible. Thank you for coming and for your very good submission.

Dr Fuller—Thank you very much.

[9.57 am]

HUNT, Mr Gregory Maxwell, Executive Officer, Western Port Greenhouse Alliance

CHAIR—I would now like to welcome the representative of the Western Port Greenhouse Alliance to this public hearing. Although the committee does not require you to give evidence under oath, I should advise that the hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The committee has received your submission and it has been authorised for publication. We would now like to invite you to make a brief opening statement before we proceed to questions and discussion. Thank you.

Mr Hunt—Thank you very much, and thank you for the opportunity to present further information to what is a very important inquiry. I have some subsequent material here. It includes a graphic of the Western Port Greenhouse Alliance.

The Western Port Greenhouse Alliance is one of six alliances in Victoria where groupings of local governments have come together around common issues to provide climate change response. We cover 52 of Victoria's 79 local governments. You will see on the material that Adrienne is presenting to you now, there is a graphic which shows the Western Port Greenhouse Alliance map. That is already out of date. We have just been joined by an eighth local government, the City of Bayside, just immediately to our north. You can see we are grouped around Western Port itself, which is a Ramsar listed wetland and a UNESCO biosphere reserve. Then around our hinterland we have got a lot of agricultural areas; we have got some quite intense urban development. We cover 860,000 residents in our eight councils, only seven of which are shown there, because Bayside have since joined us. There is a counterpart, I suppose, around Sydney, the Sydney coastal council, which also does projects.

What I want to talk about today is the impact and adaptation project which we did and it formed the basis for the submission I wrote. You will be receiving a submission later today, I believe, from one of our member councils, Mornington Peninsula Shire, which was involved in this project. In the material I have handed out is a two-sided statement of some points I would like to make today. There is the coloured graphic representation of our alliance and, on the reverse, a range of projects which we do, and an eight-page paper that I wrote regarding a community engagement program that we were involved in.

What was so good about the impact and adaptation project, which was funded by the feds as well as by the state government, is that it used the CSIRO's methodology to take the global phenomenon of climate change and apply it at a local level to look at what the likely impacts would be that would be experienced at a human scale. It made that very big issue manifest at a local level. It is very important. People might not be able to do much about a particular molecule up in the upper atmosphere; they can do something about the water lapping at the doorstep. It is making real what otherwise might be pretty nebulous kinds of ideas.

What we do get in the data is still a range of uncertainties and that is something that we have to deal with. I do not think humans are very good at dealing with future uncertainties and yet we

have to. The exact experience of climate change is dependent upon so many different things, not least of which, of course, is our own response to reducing emissions. We have to learn to deal with that. We do that already with insurance that we take out in our personal lives. Why aren't we taking it out on a much bigger scale? That would be the point I would make. It means we should be invoking the precautionary principle. Where we do not know exactly what the likely impacts are going to be, let's act conservatively in our own self-interest in all of this.

What this requires is leadership on a scale we probably have not seen in circumstances other than major conflict or that sort of thing. I was heartened by an article in today's *Age* where it appears that the opposition might be offering the federal government bipartisanship on some targets that might be taken to Copenhagen. This would be a very welcome outbreak of collaboration.

Because of this position, there are some very clear messages which our alliance is following through the projects we do, and it takes expression in the interactions we have across our communities. We recently made a submission to the carbon voluntary offsets discussion paper that the government put out. There is a message contained in the Carbon Pollution Reduction Scheme about the role of community emission reductions and I think it is an unconscionable message. Communities must count. The last thing we should tell our communities is, 'Your efforts are not relevant to the main game.' That is a shocking message and we should do everything we can to construct a scheme which involves the whole community as much as we can.

With reference to our targets, science should set out targets. It is the role of politicians to sell them, to do the implementation. If we set targets that are not based on what the science is telling us, then we are already in a confused and conflicted position. On the issue of wind power around our area, particularly in coastal environments, it is not an aesthetic issue, it is an environmental one. If communities think wind power is an aesthetic issue, the kind of climate change that is brought about by unchannelled carbon emissions is going to cause a much bigger aesthetic issue for coasts, I would argue. We really need to get that kind of confusion out of the debate.

Another one that really is standing in the way of a purposeful community response is the notion of clean coal. It is an oxymoron. Sorry to the member for coal based electrics, but we need non-carbon based energy sources and the sooner we get them the better. So long as the concentration is on trying to make the oxymoron a reality, then the more people will be lulled into think there is a purposeful response by government and they will not be putting attention into the kinds of non-carbon based energy sources that we need. It is something we need to get absolutely clear and consistent in the message we give our community.

It will require on the part of coastal communities integrated responses. In the project that was the subject of that submission we have talked about some adaptations that coastal councils might make. Often they will be engineering responses, perhaps. We do not want an engineering response to then cause, for example, a natural resource management issue. If we were to, say, raise a road around a coastal area to keep it up above what we project the storm surge might be and we stop coastal recession in the process, those salt marshes or the fringing vegetation which occurs between the water and that raised road are now going to be sufficiently inundated that they will no longer be viable. The biodiversity which depends upon that bit of coastal vegetation is then in trouble. In attempting to solve one problem we have created another. We need the

engineers and the NRM managers to sit together when they come up with their solutions. We have to have integrated responses whereby we can try and resolve as many of the attendant issues as we can. I do not think our history has been good at doing that.

I was listening to the last part of the last submission, incidentally. With regard to the responsibility for this, the City of Casey, which is where I am based, is currently looking at the prospect of requiring of intending permit applicants a climate change response plan. The Shire of Wellington down in Gippsland is already doing this. If you wish to do a coastal development in an area which may be vulnerable as a result of climate change impacts—either sea level rise, storm surge, storm tides or whatever—then it is incumbent upon you as the applicant to talk about how you are going to respond to issues such as inundation access. If you have got a septic tank, what are you going to do with waste in times of inundation? Is your building transportable if you have to take up a retreat option somewhere along the line? It is really saying to the person, ‘You own property in this area. It has these characteristics. They are the things you need to deal with.’ We will be very interested to see what comes out of Victoria’s royal commission into the bushfires as to whether a similar kind of approach is going to be taken now with people who wish to live in those sorts of vulnerable areas. I think the issues are much the same.

I will finish on the message we are giving to our communities. Climate change impacts are not new. When I do presentations around our region I am showing inundation that we have had from intense rainfall events in 2001 and 2005. These are things we deal with. What our data is showing us from this project is that these things are going to happen with such increased frequency it will cause, for example, a council’s maintenance budget grave problems unless they take these things into account. It is not a matter of principal difference; it is a matter of degree. That is what we need to deal with.

These things are within our realms of experience, the bushfire experience notwithstanding on 7 February in Victoria. It is how we deal with the increased frequency of these things that we need to take into account. Because it is going to involve quite a change in the way we do stuff, we absolutely need bipartisan leadership, which is why it is so gratifying to see the representation from this committee of inquiry. Thank you very much. I would like to respond to questions.

CHAIR—Thank you, Mr Hunt. I am glad we got the update from you because the submission is fairly dated now as the inquiry has been going on for so long. At the time you wrote you said that it was pretty obvious that we needed better digital elevation modelling.

Mr Hunt—Yes.

CHAIR—We have been advised by the Victorian government that their Future Coasts project intends to do that. With the work that the CSIRO did in conjunction with your group, did you also apply any digital modelling to looking at the issues?

Mr Hunt—We are in discussion with DSE over their Future Coasts project for the extra level of precision that will give us. We still suspect there may be a gap between what a local government needs to do with regard to planning certainty and the information that Future Coasts will give us. It will give us the very precise levels of, I think, 20-centimetre resolution even, as to what the topography is like. What we need to do is to apply the overlay now of visualisations of

sea level rise or storm surge such that we can now say with some degree of certainty to a building permit applicant, 'You need to take this into account on this particular block, but not on that one.' That is a level of data definition that we do not have at this stage. It may be that Future Coasts gives us that, or we are in current discussions with DSE to say, 'Is there bridging work that we need to do around some specific areas to apply this to a real situation to see the impact?'

CHAIR—Are the basic elements of the modelling provided by the CSIRO for your particular project transferable to other councils?

Mr Hunt—Yes. The data which they contributed to this project was the same methodology they used in their contribution to the IPCC's fourth report. We are confident that it is the best available methodology, and that is very important when we go out and talk in communities, because it has got that level of gravitas. It is showing, though, in the table—and I think I have got it there in the paper that I wrote about the climate change conversations—that the temperature data suggests we will have days above 40 and I think it says at the moment 'none current'. This year we have had four. Last year we had three. The IPCC methodology for the fourth report was probably developed through 2005-06. The science is moving at such a rate that we are looking forward to: 'Is there going to be an interim 4.5 report before the fifth one comes out in another two or three years time?' That is how fast things are moving.

What we do need to get in the public mind is, 'Weather ain't climate.' These are different things. A couple of particularly hot years, in themselves, do not demonstrate therefore that climate change is done and dusted. However, when we get a sufficient body of evidence all pointing in the wrong direction, that is when weather starts becoming climate and there is the idea that there is a longer term trend at work here. In itself, though, the fact that we have had two very hot years does not necessarily prove that, but we need to watch very carefully. That would suggest that we ought to start taking out that insurance.

CHAIR—What methodology did you use for your risk assessment profiles?

Mr Hunt—We employed a risk assessment company, Broadleaf International, and in each of our five councils we conducted risk assessment workshops. In most of them it was a full day. In the Shire of Mornington Peninsula it was a day and a half because they wanted some extra glimpses into what they were facing. We had a process whereby each of the council officers had already been given the data and given the areas for which they were responsible. They had to then do a group workshop process: 'Okay, you're the drainage engineer. If you're going to get this kind of inundation what do you think are the issues to which you're now going to be exposed as result of this?'

For each of our five councils we came up with a separate risk assessment, and so that is something they are now working through their own responses to, and then that was the basis for adaptation workshops that were usually across agency, across levels of government even, where, for example, for the wet issues—the flooding and storm surge et cetera—we had 40, 45 people from Human Services, emergency services, State of the Environment, Melbourne Water, the flood plain managers and all the various council engineers to say, 'If these are risks to which we're now exposed, what are our adaptation options?' and again progressively through our separate councils that is the work that they are going through now.

Dr WASHER—Greg, with fascination I had a look at your community engagement, because we also need to do this, of course.

Mr Hunt—Yes.

Dr WASHER—I noticed that you had a fair number of people roll up, but not a lot of young people, and you had some adverse media and all the usual things that we are liable to get.

Mr Hunt—Yes.

Dr WASHER—From this great wisdom where you have had a go at this and been moderately successful, what would you advise, if you were to do this again, that you would do differently? Give us some clues as to how we are going to market this, too.

Mr Hunt—You will be receiving a submission later this morning from Mornington Peninsula Shire and it will probably be based largely around those climate change conversations. I was doing a briefing for the Department of Planning and Community Development here in Victoria and one of their staff said to me, ‘Has this been documented?’ and I thought, ‘Well, no, it hasn’t.’ ‘Well, who’s going to do that?’ ‘Well, probably I will.’ My background is in environmental education, so for me it was a bit of a labour of love as well as something that enabled a bit of analysis.

I asked the council later—because they hand out evaluation sheets—could I get access to that data, and it is from that that I have got things about the demographics, for example, of the attendance. In the photos I am using, if people have got hair on their heads, it is white, and it was very unrepresentative of the entire population. There are 140,000 people living in that shire, we had 3,010 at sessions, and in community engagement programs you have to say that is phenomenally successful. It still means 137,000 did not go, and I have discussed in there a couple of issues about how do we—can we in fact—attract that extra market.

The Western Port Greenhouse Alliance has just been funded by the Victorian government’s Local Sustainability Accord to do a project on community preparedness for climate change induced emergencies. We have just let that tender on one of the websites. It closes next Tuesday, after which we will be selecting a consultant to carry out community consultation specifically looking at emergency response issues, so not the general range of issues as that particular thing did.

I might add we have had over 50 telephone inquiries asking for the documentation for this. If that translates into five applications—one in 10 we reckon will be good—we reckon we will have a good chance of getting someone to roll out community engagement. The McCaughey Centre here in Melbourne, which is linked with Melbourne university, has been doing a fair bit of work on this as well. The learnings we have got so far from our marketing for this: there was no one marketing exercise that was successful. We had to use the lot. We are currently wanting to get this conversation away from the boutique ‘boots, bearded, greenie, backpacker’ sort of mentality into the mainstream. One of our other alliances is showing a bit of a lead in this. There is the North East Greenhouse Alliance based around Wodonga and they have been doing a project called ‘the sustainability ladder’. So, along with the premiership ladder that the Ovens

and Murray Football League runs, they run the sustainability ladder in conjunction with a media partner, WIN TV.

What it means is that the football clubs do all the water-saving activities. You shower with a friend afterwards, and all that kind of stuff—'Who can reduce water use by the most?' When they come to play in adjoining towns, it is 'Who can get the best car pooling result?', so they take the least possible number of vehicles across to the neighbouring towns. As a result of the whole range of activities they do, WIN TV was putting on the evening news, along with the premiership ladder which is the footy results, the sustainability ladder. That gets us away from 'us earnest greenies' into mainstream stuff. Who is going to have a go at footballers for doing environmental stuff, for goodness sake? That is the kind of stuff that we need—this almost left-field thinking that takes this kind of debate into reality.

Things like the federal government's green loans might make a difference here, because we are not using an environmental argument to get to people, we are using an economic one. That is the kind of thing we have to use. What are the points of susceptibility to a message that various sections of the community have and how can we send a message that is relevant to them through that point of susceptibility?

Mrs IRWIN—You are taking the community on that journey of change, which sounds fantastic. It is very impressive.

Mr Hunt—I must say, it is not a very hard sell, certainly in the segments that we are working. We are just about to take it, I think, into a harder section. We are wanting to set up a community-wide emissions reduction program. Each of our councils has their own council corporate targets, and often that will be carbon neutrality in 10 years or whatever, and they often have community reduction targets as well. These are much more difficult to come by. How can a council compel a community person to take particular action? It is mainly through incentives, and so what we are wanting to do is roll out across our region community emission reduction programs so that we can, through the child-care centres or the community neighbourhood houses or something, leverage the relationships which councils have with their community to say 'and here is a further offer'. We will provide household assessments through either green loan accredited assessors or—we have a program in Victoria—through Sustainability Victoria, whereby we say, 'We can show you the benefits that you can derive by undertaking this range of changes.'

As I said, we are wanting to roll that out across our community, and that is part of the programs that we do, and we will run the community engagement programs as part of that. You come along, we will get someone to assess your house, and we will show you, through a workshop program, how you can maintain the benefits of that. There is no point having a five-star house unless you are running it in a five-star way. It is the behaviour change that comes along with the technology and the infrastructure et cetera that we need to work on.

Mr DREYFUS—Mr Hunt, you expressed concern in the written submission you sent us last year about fragmentation of responsibility for the coast.

Mr Hunt—Yes.

Mr DREYFUS—And you have been involved in this area for a long time.

Mr Hunt—Yes.

Mr DREYFUS—Do you think things have improved in Victoria in terms of clearer lines of control, clearer areas of responsibility, now that we have a Victorian Coastal Council, the larger coastal boards and—I do not want to put words in your mouth—relatively clearer divisions of responsibility, with bigger local councils that seem to be working together with the Coastal Council and the coastal boards?

Mr Hunt—I think it is a mixed result. The Coastal Strategy was very, very useful in that it contained a number related to sea level rise to be built into the planning processes now. Whether it is the right number or not is now open for discussion. Whereas previously we were diverted into, ‘Should there be a number or not?’ at least now we do not have to worry about whether there should be a number but whether it is the right one. The science should assist us with that.

With regard to who is responsible for which particular bit of NRM management or coastal management, we still have a way to go. In a previous job I was with a company called Waterkeepers Australia. We were funded by the then Department of Victorian Communities—DVC—to look at what prevents communities from becoming more effective advocates for their own waterway. The Snowy Estuary Keeper, the Yarra River Keeper and the Moreton Bay Keeper were groups with whom I was working.

We did a community consultation around all of the CMAs, the catchment management authorities, here in Victoria. There was almost a single message that was universal to those nine CMAs—‘We don’t know who is responsible for what’—and that is because we have departments of planning, local government authorities, water authorities with overlay referral responsibilities; coastal boards who people might think that, because they are the coastal boards, they have some role, but in fact they are advisory to a minister. There is still no clear definition, certainly in the public mind, as to who should be doing what.

The reason why this first emerged as an issue was that I was working with a group down on the Snowy estuary where Santos run a gas plant, which takes gas off Bass Strait fields.

They were wanting to change the way it was operating. The local angling club took great exception to this and were having a very big fight with the local East Gippsland Catchment Management Authority about that. But in fact they were not the planning authority; the local government was. They were just causing a lot of grief that was never going to get them the result they wanted anyway.

There still is that issue—that there are so many players involved in the whole chain of events—and someone from the community who is not involved in that finds it an opaque process. They can flounder and cause a lot of heat before they get any light through going to the right person. The Coastal Strategy is attempting to bring communities into discussions about that and there are briefings going on where I dare say this message will be reinforced by others, because I know we are not the only ones who hold this view. I remain an optimist.

Mr DREYFUS—Do you see a role for the federal government in clarifying or assisting with clearer lines of responsibility? I hesitate to suggest it even because a greater role for federal government necessarily involves yet another body or bodies becoming involved.

Mr Hunt—What was curious in Victoria was that the Kennett government's council amalgamations created stronger, more effective local governments, that can now operate on a slightly broader scale. I do think alliances are the same kind of issue, writ slightly larger and perhaps delivering even further benefits. Any one local government by itself must attend to the needs of its ratepayers or they will not re-elect them. That often can cause local governments to be inward looking to the detriment of the kinds of regional activities which they could do.

Involving them in an alliance offers them a chance to stick their head above the parapets every so often and gain efficiencies of scale, access to different ways of doing things, different responses to similar kinds of issues and a means of interacting with state government. In our case it is not likely that any one local government by itself would have been involved in that impact and adaptation project with the federal government. It was only through activity on a regional level that they were able to become one of the five adaptation projects which were done with the feds. So I think there is an opportunity for the feds to become involved, but probably on that more regional response level.

I am not saying we should be bypassing state government, although clearly there is a big debate that is always going on as to what the respective roles are of three levels of government: after all, why not the feds with a strengthened regional government approach? The City of Greater Geelong, for example, might be a case for that, and Brisbane City Council.

You then have sufficient clout behind you and a breadth of areas of activity where you might be able to do more purposeful responses which would be denied any one individual and a much smaller local government.

Mr DREYFUS—Thanks, Mr Hunt.

CHAIR—In conclusion, Mr Hunt, if you had to nominate say two or three areas where you think the Commonwealth could or should be involved, what kinds of responsibilities would you see a future federal government taking in this whole area of coastal management?

Mr Hunt—As Dr Washer has pointed out, community engagement is so important, as is getting this kind of debate into the general community discourse. We need people to be involved in purposeful conversations. Yes, there is change coming. I do not think the message is therefore, 'We'll all be rooned,' as Hanrahan might have said. This is something that we can respond to. It is not outside our realms of experience but it is going to require us to do something differently, and federal leadership in that area is very important.

I sent an email to my counterpart down in this region, the other Greg Hunt—the impostor, as I call him; I was here first—not long after he was given his opposition responsibilities, and suggested that here was an opportunity where we could really get some bipartisanship going. I felt that the response I got from him was that he thought he might have already been contributing to that. Getting this out of the, 'He said', 'You said' adversarial political system is absolutely fundamental. Exactly how we do the implementation is your job.

That is the politics of the situation and no doubt in a two-party adversarial system there is going to be a lot of argy-bargy about that, but the more things we can agree on as common ground on which we can work and on messages from which we will not depart, the better off as

a community we are going to be. We already have the Kininmonths, Bob Carters and Ian Plimers out there confusing the public debate. They are not helpful at all and they are standing in the way of us being able to get going.

We are talking about a contested policy area. There are always going to be different views. The only way we are going to get the community to take up the kind of response needed is by consistent and unified messages, and as much commonality as possible. We need to maximise the impact of that.

CHAIR—Thank you very much, Mr Hunt, for your written submission and for bringing the committee up to date with the outcomes of the impact statements that you have done with the assistance of the CSIRO. In conclusion, I formally thank you for attending the hearing today. The secretary will send you a copy of the transcript for any corrections that need to be made. We would be grateful if you could also send the secretariat any additional material that you have undertaken to provide as soon as feasible.

Proceedings suspended from 10.26 am to 10.40 am

STEVENS, Professor Leonard Kelman, Fellow, Australian Academy of Technological Sciences and Engineering

CHAIR—I would now like to welcome the representative from the Australian Academy of Technological Sciences and Engineering to our public hearing. Although the committee does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The committee has received your submission and it has been authorised for publication. We would now like to invite you to make a brief opening statement before we proceed to questions and discussion.

Prof. Stevens—Thank you. There is a concise summary on page 2 of our submission. I will expand on what I believe are some of the key issues. First of all, existing and proposed development in low-lying coastal areas, which are already at risk from inundation under current conditions, may be at considerably greater risk if climate change projections eventuate. Evaluation of these risks can only be made for specific localities using detailed information on local topographic, economic, societal and legal conditions, together with spatially appropriate climate change projections for that specific location.

We believe that nationally consistent assessment of impacts is essential in order to ensure there is rational economic and societal decision on priorities. We believe that this does mean an involvement by the Commonwealth government. We suggest that this could be best achieved through a nationally based council established by COAG.

This council will be responsible for describing the processes of assessment and for developing guidelines for their interpretation, as well as application. It should also be responsible for the coordination of state and local government efforts in this area, and for advising on appropriate research which is needed to reduce the uncertainties regarding climate change projections.

The risk management framework which has been developed by the Australian Greenhouse Office, now the Department of Climate Change, is based upon a nationally accepted Australian Standard 4360, which has been adopted by the Building Code of Australia. This does provide a methodology for the rational assessment of likelihood, consequences and hence risk, and adaptation strategies. We believe that optimistic and challenging projections should be used in these assessments. The academy strongly supports the approach put forward by the Department of Climate Change on risk management and we encourage its further development as a major technique for assessment and providing information for all stakeholders in a transparent and readily understood manner. There is a strong need for proper education in this area. I will leave it at that and respond to questions.

CHAIR—Thank you, Professor Stevens. Since we received your submission I understand that the academy has been involved in a report, the *Assessment of impacts of climate change on Australia's physical infrastructure*, looking particularly at coastal infrastructure. Would you like to update the committee on some of the important findings that have come out of that report?

Prof. Stevens—Yes. This is the report you may have seen. It is perhaps slightly dated now. That report was finished just over 12 months ago. We do not see any reason to change what we said there, but we do have much more information that is coming through, particularly from the CSIRO and the Bureau of Meteorology; work that was certainly not available to us at the time we produced that report. The 2008 report on climate change by the CSIRO has given us a much better appreciation of the statistical distribution of these projections. We recognise that they are projections and not predictions. But we can now look at them in a probabilistic way—that is, we can give percentiles for the likelihood of an event. We need more of that sort of information. It provides us with the basis of the risk management technique and methodology that I have already referred to.

CHAIR—You have also, as an academy, been involved in discussion about a national elevation data framework.

Prof. Stevens—Yes.

CHAIR—Would you like to comment? We have heard from a range of state and local government authorities about the application of digital elevation modelling in their particular coastal zone. Are there any concerns about consistency of approach in terms of the level of resolution and the technical approaches being adopted?

Prof. Stevens—Yes. We have made the point in our submission about the need to improve the consistency of those results and we believe that that is an important area where, again, we need the Commonwealth government to provide guidance on the processes and also to provide assistance in getting that information.

CHAIR—So you would see that as an important ongoing function?

Prof. Stevens—We see that as a very important ongoing piece of work and also, of course, the further research that is needed. Particularly in the coastal area, we need the specific locations to be studied and we need that spatial information, particularly on the climate change effects, for example, on wind, storm surge, as well as the sea level rise.

Dr WASHER—Professor Stevens, you mention in your summary here about the building standards. We have not heard a great deal about building standards in the coastal areas. I was wondering if you could flesh that out a bit more for us.

Prof. Stevens—Yes. We believe that in Australia we do have a very good framework of standards. We also have quite an extensive consultancy industry who can provide information. Some of the problems that we have got relate to the provision of building structures where they have not been properly designed in the past. Where structures have been designed—and I am particularly talking here about those structures that are subjected to natural extreme events like wind or earthquake—we have found that, when there has been an extreme event which may well have exceeded even the design limits, those structures have performed very well.

It is in areas where we have not had proper design—for example in buildings in the tropical cyclone areas which were impacted by Cyclone Tracy in Darwin or Larry in Queensland—those buildings have not performed well. Where buildings have been designed, they do perform well.

We believe the same holds for all coastal structures. The revision of standards and the application of building regulations, for example in Far North Queensland and in the Northern Territory, has led to considerable reduction in the amount of damage done when we do have these naturally occurring extreme events. We have got a good framework. We need to ensure that that framework is properly applied. We see the Building Code of Australia as having had a marked influence in the last 10 to 20 years in coordinating that on a national basis.

Dr WASHER—Thank you.

Mrs IRWIN—Professor Stevens, following on from Dr Washer's question to you regarding building standards and planning regulations, also on page 2 of your submission you have stated:

- improve coastal zone governance to ensure that buildings are not constructed in areas where the risk of damage from climate change events is high ...

You then also go on in your submission on page 5 to talk about the possibility of legal liabilities arising from this. Who do you feel should be responsible for the associated compensation claims if significant damage eventuates? We are trying to get our heads around this. Do you feel that it should be our federal government, state government or local government?

Prof. Stevens—We realise this is a difficult problem. You can be in legal problems if you do not do something or if you do something. If you do something, like prohibiting building in a certain area, there will be people who are aggrieved by that and it might well become a legal issue. The legal side needs to be examined much more closely than we have in the past. It has not been coordinated. People are relying upon precedents set mostly overseas so far, although I suspect we are going to see that tested in the courts. I would rather see some research being done now rather than having it all developed by litigation in the courts, which will provide precedents.

I am sorry I am not able to give you sound advice on who should assume that responsibility. It is an area in which I think you should be recommending that there be a great deal more study made. We have had people from legal firms involved with our discussions. Some of them are looking forward very much to the litigation that might result.

Mrs IRWIN—I am sure they are.

Prof. Stevens—But I believe we should be here drawing upon what expertise we have now, but also putting in place some quite detailed research.

Mrs IRWIN—It was interesting to read in your submission that you put forward a recommendation that Australia should create a national coastal management council. Can you further expand on that recommendation that is in your submission?

Prof. Stevens—Yes. We believe that there is the need for a rational system which is consistent right across Australia. The only way we are going to get that national rational approach, I believe, is by bringing together the states through something like COAG. That is why we need a council. I would not see that council as getting involved in particular developments or assessments. It should be providing the process and policies. It should be ensuring that there is a transparent system which will make sure that all stakeholders are properly aware of the assumptions that are made in any assessment. In particular, that we do have projections which

are based upon modelling and that modelling gives us this probabilistic information about the likelihood.

Likelihood is a most difficult thing of course to assess, but the framework that I have suggested—the AS 43600 standard—does provide you with much better guidelines for coming up with a rational assessment. With the improved projections and the improved probabilistic information, I believe that can then be put into our rational assessment system.

Mr DREYFUS—Professor Stevens, you have made reference to changes that have occurred in building codes around Australia. There is a Building Code of Australia, of course, but it is administered on a state-by-state basis, albeit overseen by an Australian Building Codes Board. You have made reference to changes that have seen an improvement in standards to deal with cyclone events and storm events. What additional changes would you like to see to the building codes that are prompted by climate change?

Prof. Stevens—The role that the building code has assumed is to set policy, and the standards then which are referenced by the building code develop the process. The Building Code of Australia, for example, sets the importance of structure and says that you will design that for a certain probability of, say, a one in 500-year return period; or an annual probability of one in 500 for the wind loading on that. What I believe the building code should do, and is doing, is to require that those probabilities should take into account future climate change impacts on wind speeds in tropical cyclone areas and on wind speeds in southern areas.

It should also be concerned about the consequences—that is, the loading from the same wind speeds should be used. But you also should require that the building standards by which any building is constructed are going to be sufficiently robust—that is a technical term that is used in the building code—to withstand extreme events above and beyond what might be regarded as currently the values. We need to be able to assess the capacity of structures. The Building Code of Australia, for example, is undertaking research at James Cook University into the real capacity of domestic housing; something which has not ever been attempted before.

So there is this sort of research into both the likelihood of the events that should be taken into account and required to be addressed in the reference standards, but also the consequences—and that is the design of structures for robustness. I think the Building Code of Australia is in a very good position to make quite rational recommendations on the way in which we should be responding to climate change projections. I do emphasise that they are projections and not predictions, but we use exactly the same process of risk management in normal design, so we should use that process of risk management taking into account climate change.

Mr DREYFUS—The building code of course deals with buildings yet to be built—in other words, it is a prospective type of regulation—and does not say anything about buildings that are already built; the current building stock in Australia. Have you got any suggestions as to how government might be able to deal with the probable inadequacy of the building fabric of buildings already built in Australia?

Prof. Stevens—This is a part of the research that has been going on at James Cook University particularly, and they are people well worth talking to.

One of our problems is that the undesigned stock of domestic housing is so variable. It has got so many different defects. Each one almost has to be assessed on its own and decisions made on how you might attempt to update it. I am afraid in many cases my view would be that it is not very feasible to update some of these buildings that were built—I am talking about domestic, undesigned buildings—about 40 or 50 years ago. You might accept that they are at risk, but the cost of upgrading might well be beyond what is regarded as worthwhile, so you put in place emergency routines for evacuation.

If there is a tropical cyclone coming in at Cairns, you do not try to update some of these things. In other cases, it will be worthwhile updating, but it will require individual assessment. Buildings that have been properly designed in the last 25 years, I believe, are very capable of being assessed. There are standards for the assessment of buildings and, in most cases, the adaptation that would be required would be quite affordable.

Mr ZAPPIA—Professor Stevens, can you advise me who sets those building standards or those codes?

Prof. Stevens—Who sets the standards?

Mr ZAPPIA—Yes.

Prof. Stevens—The building code sets the policy.

Mr ZAPPIA—Yes, but can you advise me which body actually sets the code. Is it a government body or an industry body?

Prof. Stevens—It is the Commonwealth government—the department of industry, trade and tourism. Is that still the correct terminology?

Mr DREYFUS—It is Senator Carr's department, Professor Stevens.

Prof. Stevens—Yes.

Mr DREYFUS—It is the Department of Innovation, Industry—

Prof. Stevens—I am sorry, yes. I am a bit out of touch.

Mr DREYFUS—I cannot remember the exact name of the department either because they keep changing the names. I will answer my colleague's question by saying I think it is the Australian Building Codes Board, which directly answers to Senator Carr as the minister for innovation and a number of other things.

Mr ZAPPIA—My colleague might be able to answer my next question, which is: who is on that board? I am trying to ascertain whether the board comprises public servants only or whether it has industry representatives on it.

Prof. Stevens—It has industry representatives and it has independent people. I am not quite sure who the chairman is now, but recently it was a chap who was quite senior in BHP. In all

cases, I understand they have an independent chairman. They have representatives from industry and they have input from academic and scientific institutions. Those decisions are made on economic and societal grounds. For example, setting an annual probability of a wind of one in 500 or one in 1,000 is deliberately done to set a level of safety that will be acceptable to the community on societal grounds and also acceptable on economic grounds. If there are changes to the policy or the standards, they have to be investigated to determine the economic and societal consequences. It is a national decision, really, on what are acceptable levels of safety. The standards, which are then referenced, give you the process by which you satisfy those policy decisions. Am I correct, Mr Dreyfus?

Mr DREYFUS—Yes. Thank you for that; it was pretty good. The reason I have relatively recent knowledge of this is that the Building Codes Board of Australia is intimately connected with another inquiry that I chair. That is the Legal and Constitutional Affairs Committee's inquiry into disability standards in public buildings, which quite clearly is a matter that concerns the Building Codes Board.

Prof. Stevens—Yes. I think the Building Codes Board is a very good addition to provide that national guidance.

Mr ZAPPIA—Professor Stevens, thank you very much. You have clarified the matter for me.

Prof. Stevens—I hope I was not sounding too much like a teacher!

CHAIR—And you would be aware, Professor Stevens, that the federal Department of Climate Change has provided a grant to revise and review the building code.

Prof. Stevens—Yes.

CHAIR—Is that the James Cook University?

Prof. Stevens—I do not know who is doing it. It is a small part of the work that is being done at James Cook on examining the behaviour of domestic dwellings. I am not sure to what extent James Cook are involved with revision of the building code provisions.

CHAIR—There is also some work being conducted to update the *Australian Rainfall and Runoff* handbook produced by Engineers Australia, so I think the federal department is mindful of the need to take into account the consequences of climate change and is working in that direction.

Prof. Stevens—When Minister Wong presented our report in November, she had already pre-empted many of the recommendations involved in this report, I have to say. We were delighted.

CHAIR—As the Prime Minister would say: staying ahead of the curve.

Prof. Stevens—I finished writing this 12 months before, but it took a while to release it.

CHAIR—Thank you very much, Professor Stevens, for your written submission on behalf of the academy, and your presentation. As the deputy chair said, we had not had many submitters

dealing with the issue of building codes, and it is a very important part of our future strategy. We would like to formally thank you for attending the hearing today. The secretariat will send you a transcript of the evidence provided. If there was any information that you undertook to provide, we would be pleased to receive that as soon as possible.

Prof. Stevens—I have been pleased to offer this and I hope it is of some help.

CHAIR—Thank you very much.

[11.09 am]

GRAHAM, Mr Bruce David, Director, Strategic Development, Wellington Shire Council

WEBB, Mr Lyndon Meredith, Chief Executive Officer, Wellington Shire Council

SCHYSCHOW, Ms Sophia, Manager, Renewable Resources, Mornington Peninsula Shire Council

CHAIR—I would now like to welcome representatives from the Wellington Shire Council and the Mornington Peninsula Shire Council to our public hearing. Although the committee does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. In that regard, the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The committee has received submissions from both councils and they have been authorised for publication. We would now like to invite you to make a brief opening statement before we proceed to questions and discussion. We might start with Mornington, thank you.

Ms Schyschow—Thank you, and thank you for the opportunity to speak today. Perhaps I can just describe the Mornington Peninsula shire. It is a mix of rural, urban and coastal townships, with about 40 little towns and villages. We go from wine tasting to surfing and swimming and have 10 per cent of Victoria's coastline—over 190 kilometres. Our normal population is about 145,000, going to over 200,000 in the summertime, and with just a little bit under five million visitors per year, many of those from the metropolitan area of Melbourne, so we form an important recreational area for Melbourne.

This morning you heard from Mr Greg Hunt about some work that was done by CSIRO for the Western Port Greenhouse Alliance and, essentially, that is a little bit what I am going to talk about today. We ran some climate change conversations to engage the community in that discussion, so that is what I would really like to focus on this morning, rather than the submission that we made previously.

As you realise, that report was jointly funded by the federal government and state government. In sharing that information with the community, we developed an information booklet and we wrote to every household and every business on the peninsula, inviting them to come to any one of a series of meetings. We held them in winter, which is a hard time to get people along, and all in all we had over 3,000 people attend those meetings.

On the first night, which was down at Rye, it was raining, it was dark and it was miserable. We went there and thought, 'We'll set out 30 chairs.' Then we thought, 'Let's be extravagant; 50.' Over 250 people came. There was standing room only. We thought the next night, 'That was just an aberration.' This happened night after night. People were very, very interested in coming to hear what climate change would mean for them, their life, their house and their household.

One of the findings was that there was intense community interest and engagement. One of the questions asked of Mr Hunt before concerned demographics. It is true: we got old and young and not much in between. We are looking at how we deal with that in the future. People told us that they were bombarded with a lot of information and they did not find it helpful and then, in the next sentence, told us that they did want information.

But they want very specific and targeted information. They want information on things like solar power or assistance with actions such as buying solar power or solar hot water, or water tanks and things like that. And they want the council involved to give them some confidence of who they are dealing with, that it is actually going to work, they will get their money back, and that it is a feasible and sensible thing to do. They also wanted ongoing communication.

So what has the council been doing lately? We have been holding workshops. Two Saturdays ago we held a composting workshop and a lot of people came to that. We have done audits on people's houses. That is a federal program, to train some auditors. We have been going through and doing that.

They told us they wanted us to do group purchasing. They felt more confidence in the council running those group purchasing programs for solar power. We asked people to sign up. We did an expression of interest. That is out at the moment. We have two more meetings to have where people can come in and sign up. Essentially, if you have got a single-storey house with a Colorbond roof at the right pitch and you sell your renewable energy certificates back, you can get your one kilowatt hour for free. I think that is a great deal. We are encouraging our community to get ready for a carbon- and water-constrained future. We have done a lot of things internally to the way we operate. That is a given. People expect that. But now we are working with the community to see what we can do to help them respond.

In terms of communication, we asked them if they wanted to register on email. Every six weeks we send out a climate change newsletter where we talk about some of the things we do, new products, some of the scholarships or funding opportunities, rebates and things like that. People have told us that they are finding that really helpful. We also got surveys back from 1,800 people where we asked them a number of questions following the climate change conversations. One of the interesting things for today is that they did see it as a shared responsibility, adapting to climate change—as a federal, state, local and individual responsibility—and were willing to play their own part and believed every other level of government should as well. What next do we need the federal government to do? There are two things I would like to put forward. One is to help us with more about the science.

This morning Mr Hunt talked about the modelling that was done. There has to be some more work done with that, with the seabed modelling. Also, council has been doing its own modelling inland, and where you have storm surge, sea level rise and wind coming in from the sea, we also have short and sharp catchments, so the rainfall run-off comes down very quickly. We need to do modelling of some areas to understand where we are going to have flooding, and inland flooding as well. All of our catchments go out to the bay. We have got 200 outlets. That is one area where we need to do some further work, and the second area is in funding assistance for adaptation measures for infrastructure along the coast, to protect our townships and beneficial uses. Thank you.

CHAIR—Thank you. Mr Webb, would you like to bring us up to date with developments in the Wellington Shire Council?

Mr Webb—Thank you, Chair. I appreciate the opportunity to come and address the committee and to have made our submission. As you have there, we have updated our submission because there have been some things that have been happening since we spoke previously.

CHAIR—I must say, the scenario looks far more optimistic than when we first discussed this a year ago in Brisbane.

Mr Webb—That is right.

CHAIR—I am glad to see changes happening.

Mr Webb—We have been taking some initiatives ourselves. I will go back a touch to explain the genesis of this submission, which comes from some work that our council has been doing on a stretch of the coast along the Bass Strait. We have a large part of the Ninety Mile Beach there, and about 25 to 30 kilometres of that has what we term inappropriate subdivisions on it. About 11,000 allotments were created back in the fifties, sixties and seventies, sold to incoming migrants for a song, and it is the classic: on the bottom of the lake and on the fragile dune system. It spreads about 25 kilometres. You could compare it to Surfers Paradise along the beachfront there, but it has little by way of services.

As we have worked towards trying to find a resolution for the owners there—who have not been able to develop it, so what do they do with the land?—we have done investigations of this site and we have found that, because this dune is the barrier between Bass Strait and the Gippsland Lakes, there is this coast-ocean continuum that is in conflict. In some parts it is quite low. So when we put together the suggested sea level rise of 0.8 metres, which is a recommendation that has come out of the Victorian Coastal Strategy—and that is one of the elements that has happened since we spoke—and the potential for flooding from inland, plus the potential for subsidence from aquifer depletion due to oil and gas extraction in Bass Strait, plus storm surge, we find that for one of our communities—The Honeysuckles it is called; and in that updated submission there is a map that will show you—quite a proportion of the land in that settlement will be flooded.

In fact, there could be a breach in the barrier dune that would change the structure of the arrangements entirely. That was perhaps a worst-case scenario that was painted but it caused some consternation in our community when the council tried to address it and decide what to do.

In the event, the council has decided to take an initiative and, because the planning scheme allows development to occur in this area subject to a permit, the council has said, ‘Development can occur but any applicant will have to produce a climate change response plan to take account of sea level rise.’ This requires the applicant to address the issues of mitigation, retreat, adaptation or whatever is appropriate in the situation to ensure that they will remain safe and they will not cause environmental hazards et cetera. This has been a way that the council has seen to move forward in the absence of broad-ranging policy from other levels of government. We do not have a set of guidelines about how to deal with this, and we have been holding

discussions with the Victorian government particularly on this front to encourage them to come out with more definitive guidelines for councils in our situation. We have a number of communities that are in a similar situation, but we do not have the detailed information yet to be able to define it.

Because of the work we were doing on our inappropriate subdivisions we know what we are facing. We are in that situation where the more information we gather the more challenging it becomes, because we have a responsibility to deal with it. In some of our other communities we do not have that detail of information, but we suspect that we are facing a similar situation.

We are suggesting that there is a need for governments to provide stronger policy direction and some guidelines for councils to help them to deal with the situation—I was going to say ‘where they are at the coal front’; maybe it is the water front—when a person has a piece of land which the planning scheme says they are right to develop, and council is there in a council meeting with a passionate, angry gallery full of people asking what to do. The council needs some very robust guidelines on how to deal with that.

That is part of what our submission says: that we would like other governments to provide greater guidance, particularly in relation to the development measures that can occur, how that should occur, and provide some more definitive information on the impacts of climate change and how people can deal with it and how councils can manage the process of change of the planning arrangements. Those are probably the key elements of it—unless you want to add to that, Bruce?

Mr Graham—I think that covers it pretty well.

Mr Webb—The rest of it is set out in our submission. We have developed this plan that people must produce, and the first one of those was very well done and set a great benchmark for it. The person did it very responsibly. Of course, we now have the Coastal Strategy that requires council to take account of the 0.8 of a metre and use the precautionary principle. To those in the game it is probably well understood, but for those who are not in the game, what does ‘the precautionary principle’ mean? It is rather a vague term. Perhaps I could leave it at that, Chair, and answer any questions.

CHAIR—So all future developments will now be subject to this climate change impact in that strip that has been identified as vulnerable?

Mr Webb—No, that is not quite right. That is where a planning permit is required. Some of our communities have urban zonings, and the one in The Honeysuckles had a semi-urban zoning, if you like, which required a planning permit. But, for example, just five kilometres or so to the south-west is Seaspray, which has a zoning that does not require a planning permit. A person needs a building permit, but their right to build is there, so all they have to do is get a permit for the type of house that they want to build and that can be issued by a private building surveyor in Victoria. So not all people are covered by this requirement that we have.

CHAIR—You said that one of the priority areas of concern for you is greater guidance from different levels of government about how to deal with the situation where parts of your territory are deemed to be in a particularly vulnerable area.

Mr Webb—Yes.

CHAIR—Has the recent Victorian government's policy on coastal management provided you with a greater level of certainty in how to deal with issues that come before you as a council and what kind of greater direction are you envisaging? Is it to do with issues relating to potential compensation and legal liability? What specifically are you looking for from the federal government and the Victorian state government?

Mr Webb—Probably our thrust is mostly to the Victorian government in the first instance but, perhaps at the higher level, to the federal government. What we are looking for is more specific guidelines; perhaps overlays that might trigger the need, particularly in areas where a development right exists, to address the issue of climate change and what its potential impact is on sites. At the present moment we do not have that level of definition or trigger point initiation. The council would be looking for quite specific guidelines as to the types of issues that should be addressed, how to deal with whether it is appropriate to look at retreat or to look at some form of mitigation or whatever.

It is a much more specific thing than what I will call the average punter out there can understand, because a lot of the people who come into our gallery say, 'Look, this is just something that people think will happen, and maybe it will, maybe it won't, and you're putting this in place contrary to what the planning scheme might say. You're requiring us to do things or to take a particular approach that isn't actually required.' Of course, the council then finds that that is fairly hard to deal with. They have been to VCAT on a couple of occasions on the basis of refusing development on the sensitive dune areas in our inappropriate subdivisions and been knocked over by VCAT because of the lack of specific policy requirements that would prohibit the development. Council's refusal has been overturned in VCAT, so they have got a bit cautious now about whether they might refuse something.

CHAIR—When it was overturned, was that prior to the new legislative provisions?

Mr Webb—Yes.

CHAIR—If you do not mind, we will deal with Wellington Shire and then come back to deal with the issues that you raised in your submission to the committee. Any comments or questions about the Wellington Shire submission?

Dr WASHER—Lyndon, the problem you brought up is that there has been approval for development in certain areas that currently would be dubious to build on for safety purposes long term. The Victorian government gave us a clear opinion at least that they would have their surveillance of the coastline done and completed by the end of next year; within 12 months.

CHAIR—Future Coasts project.

Dr WASHER—Yes, Future Coasts. So these risk areas will be defined by them accurately. I say this as a proposition—and I was a CEO like you at a city council—if you can find a bank or an insurance company stupid enough to insure or loan money to build that building, then I would be very surprised, particularly if this comes out from the Victorian government in a short period of time. I am surprised these people can get money and get insurance to do this.

Mr Webb—What you say is probably true once that information comes out, but at this moment we do not know how rigorous that will be or what constraints that might impose. We are seeing quite substantial development continuing in areas that we would feel are susceptible. We have several applications in this most susceptible area that we have identified with our detailed information at The Honeysuckles and people are still proceeding to develop. Whether they are borrowing or have their own funds or what, I do not know, but certainly it is not as if development has stopped.

There has been serious concern that the information that we are putting out there is affecting people's land values and that is another issue that we are trying to wrestle with. We are having negotiations with the state government about buyback out of the inappropriate sensitive dune areas, but we have not gone into this area where there are planning controls that do enable development at this stage. But development is continuing.

Mr DREYFUS—Thinking about Seaspray, which is the example you gave, has your council considered imposing a requirement throughout the shire that there be a planning permit obtained to build? I must say I am a bit alarmed to hear that there is anywhere along the coast in your shire that would permit building without a planning permit.

Mr Webb—Yes.

Mr DREYFUS—You have made the distinction that you need a building permit.

Mr Webb—Yes.

Mr DREYFUS—There are other municipalities in Victoria where you cannot build anything anywhere without obtaining a planning permit.

Mr Graham—Perhaps I can respond on that one. The problem we have highlighted in the submission is that we do not have the tools to put a control in place—a climate change based tool—that would prevent development occurring. There is the broader high-level stuff. The 2008 Coastal Strategy has been included. There have been some amendments. But there are no tools in there that would allow us to prevent development on the basis of potential climate change risk.

Mr DREYFUS—I was not asking about a complete ban on development or prevention of development so much as simply getting to the first stage of requiring a permit.

Mr Graham—Exactly. I will go to that point, too. There are no tools in the planning scheme that would allow us to put a universal trigger, even to put the climate change response plan requirement that we have put in relation to The Honeysuckles. That is something that we have raised with the Victorian government and we are raising here too. We see it as a gap in terms of the policy and the planning system at this stage.

Mr Webb—We would be interested in that. We have been doing work on a number of our settlements jointly with our neighbouring East Gippsland Shire Council and other councils on the coast to identify our communities and the extent of development and so on, but at this stage it has not got to the point of putting a universal requirement for a planning permit for a dwelling—other uses, yes, but not for a dwelling.

Mr DREYFUS—But theoretically you could introduce an overlay. I am assuming that Seaspray is zoned residential.

Mr Webb—Yes.

Mr DREYFUS—You could introduce an overlay for the areas within Seaspray and other coastal communities close to the coast requiring the obtaining of a planning permit for a dwelling.

Mr Webb—You are correct. Theoretically, that could happen. There is a process that needs to be gone through to achieve that, of course, and it may well be that we have to go to the resort of having that sort of an initiative.

Mr DREYFUS—Just to move to another planning aspect, I was very interested in the material that you produced today, and I thank you for updating Wellington's position. You have responded wonderfully promptly to the Victorian government's new controls because they came in, I think, in mid-December and you have adopted responses to it almost straightaway. One of the procedures that you have adopted for development in areas where a permit is required to build a dwelling is this requirement for a climate change response plan.

Mr Webb—Yes.

Mr DREYFUS—You have produced this this morning. Looking at the detail of it, I see that it incorporates a requirement known as a section 173 agreement here in Victoria.

Mr Webb—Yes.

Mr DREYFUS—Have I understood this correctly: that where the climate response plan, produced as a condition of obtaining a permit to erect a dwelling, involved potentially the removal of the dwelling at some future time because of changed conditions, that section 173 agreement would impose the requirement on the owner to remove the dwelling?

Mr Webb—That is certainly the intention. It goes on title and the intention is to bind all successors. There has been a suggestion—and you might have a better appreciation of this than I—that that is potentially challengeable, or there is a question as to its rigour. However, we see that as the best tool we have at the moment to ensure that all future owners are bound by the basis upon which that permit is issued.

Mr DREYFUS—The section 173 agreements have the great virtue of going on the title so that all future owners take the title with notice.

Mr Graham—I was just talking to the CEO. The first example we had of one of these climate change response plans was prepared by a property owner at The Honeysuckles. This was a permit condition. It was prepared and then has been signed off by council. Of his own volition, the property owner has agreed to certain things that they will do as part of their climate change response plan, one of which is, under certain circumstances, the removal of the dwelling from the land. That is the way it has worked in this particular case. Whether everybody puts together a response plan that would include that particular provision, I do not know, but that particular one,

which probably went beyond what the guidelines called for, actually includes that requirement. There is a bunch of other requirements as well—warning systems and the like.

Mr Webb—Could I make just one other point about the section 173 agreement. You are quite right about affixing it to title, but the other aspect of it that was attractive was that it actually causes that party and successors to acknowledge that there is a threat from climate change, so it is ongoing. There is an acknowledgement that that building is under threat, is in danger, potentially.

Mr DREYFUS—If I can ask a more general question: does the shire have a concern about its exposure to liability for negligence actions arising from decisions that it makes in this area?

Mr Webb—It does have concerns and that goes both ways.

Mr DREYFUS—I am not asking you to reveal legal advice you might have received.

Mr Webb—No.

Mr DREYFUS—But if there is anything you could say to the committee about that exposure or what the council is doing in response to it, that would be of interest to us.

Mr Webb—I think that the section 173 arrangement is part of its attempt to deal with potential liability. When it considered a proposal that the officers put forward to it that, in the light of the information we now hold, we should perhaps put a moratorium on development in that area, there were threats of action at that time, and the council was concerned about its liability and felt that it was not willing to take the risk of facing such actions in the absence of stronger government policies or guidelines that might strengthen its arm.

Mr DREYFUS—But the actions you are talking about are not the kinds of negligence actions arising from someone suffering damage down the track because of a failure to take account of climate change, but rather the reverse: the kind of action which forces the council to, for example, issue a permit or administer the scheme as it stands, so as to achieve development.

Mr Webb—Yes, but there is also that other concern that down the track there may be the other action to say, ‘You should have had regard for climate change,’ so they find themselves between a rock and a hard place.

Mr DREYFUS—Often the position of government, Mr Webb.

CHAIR—Mr Zappia, have you got anything? We will finish with Wellington and then we will move back to Mornington.

Mr ZAPPIA—Mr Webb, turning to page 4 of your submission, you say, ‘While the release of the Victorian Coastal Strategy in December 2008 has assisted, comprehensive policy planning and management frameworks are still required to address potential inundation and coastal erosion hazards as a result of climate change.’ I take it from that comment that you are suggesting that the Victorian Coastal Strategy is not adequate. Firstly, I would like confirmation of that. Secondly, have you made your views about that known to the Victorian government?

Mr Webb—Yes, it is probably a reasonable assessment that we think that it is not yet adequate. It is not specific enough. Certainly it is a broadbrush thing that says, ‘Allow for 0.8.’

We know from the work that the CSIRO has done in the Bass Strait, past our shire, that the impacts of storm surge or sea level rise varies, depending on where you are and even around the coast. That it is rather a broadbrush thing. We think that there is a need to be more specific about its impacts on the land. So where is it going to spread, what land will be affected at what levels, and what other impacts might it have? For example, we have large tracts of Ramsar wetlands, so part of the concern is that we will potentially lose those as sea level rises. So a lot more specific information is sought there.

We have, at numerous forums, raised this question about the need for more specific guidelines and information that will enable us to convey better information to our communities and help them to understand and to prepare and to deal with the potential impacts of climate change.

Mr ZAPPIA—Have you had any response from the Victorian government as to whether they would take those concerns on board and provide some additional comments in their strategy?

Mr Graham—Perhaps I can respond to that. The Victorian Coastal Strategy itself indicates that. I would just refer to the comments we make in paragraph 13.12. The strategy also calls for:

Completing, as a matter of urgency, a coastal vulnerability study and incorporating the findings into relevant policy, planning and management frameworks.

So the Victorian government itself is saying that there is a broad policy setting in the Victorian Coastal Strategy. It says that there needs to be some more science done in terms of coastal vulnerability and there needs to be, in their view—and we have had this discussion with them on a number of occasions—detailed policy, planning and management frameworks to assist the community and councils and others to deal with this issue. It is pretty clear that the Coastal Strategy is a pretty good start, but we are looking for some more detailed work to be done. Our understanding is that the time frame of that is the similar time frame indicated to you in terms of your Future Coasts material; by the end of next year, we understand.

Mr Webb—If I could add one further thing. Prior to the release of the final Victorian Coastal Strategy, back when it was in draft form, we had a letter back from the relevant minister to say basically that we really did not need much more than the 0.8 of a metre and the precautionary principle—that that should be enough for us to deal with anything. So we have not had a lot of joy yet.

CHAIR—The dilemma is that I do not think the level of certainty that you seem to be after is going to be able to be provided to all councils for all sections of their coast. But I would imagine, once you have the digital elevation modelling that is foreshadowed in the Future Coasts program and apply the precautionary principle, which is part of the overarching policy, it is really a matter for local government then to apply that available best science and incorporate that into the planning regime. Would you agree with that?

Mr Webb—Yes.

CHAIR—So it is really the scientific data that you require.

Mr Webb—That would go quite some distance to assisting us.

CHAIR—Beyond that, Mr Webb, what else would?

Mr Webb—What we talk about is a tool kit of planning controls, perhaps based on the information that comes out from that digital terrain modelling et cetera. Then, ‘These areas are particularly susceptible,’ or, ‘These might have an overlay imposed,’ and it might trigger certain actions or require certain responses in certain areas. So a more detailed suite of planning controls is probably what we would be looking for.

Mr Graham—If I could add to that. Other jurisdictions—New South Wales; certainly in New Zealand, for example—have a quite comprehensive set of management tools provided to local authorities to work through these issues.

CHAIR—That is not what we heard in New South Wales when we took evidence. Theirs is very outdated.

Mr Graham—It is outdated but at least they have got something.

CHAIR—In fact, I think the best case study that we have of state policy is here in Victoria. That is why I am penetrating beyond that and saying, ‘What else is it that you require beyond the vulnerability modelling that will be done under the Future Coasts?’

Mr Graham—Yes.

CHAIR—So you want then for the government to suggest a range of options so that, if your area is particularly vulnerable, then these are the kinds of options that councils ought to consider?

Mr Graham—Yes.

CHAIR—But it seems to me you have come up with your own innovative response in the absence of any direction.

Mr Webb—We have. Exactly.

CHAIR—Why do you feel the need?

Mr Webb—We do see that as interim. We see that as not tested. Is it appropriate that our approach is putting the onus back to the applicant to say, ‘You go away and prepare this. Now, you don’t have to go and get the CSIRO to do it. You just can do it yourself with whatever information you can get. Bring it back and we’ll assess what we feel about it and, if it’s okay, we will let you go ahead.’ In 20 years time when people are better informed or whatever, is that going to stand up, because it is our home-grown response, I suppose. Certainly it has been well received by our community as a response. It is a sensible, practical, pragmatic response. But will it stand up in the future?

CHAIR—We had better get back to—

Mr Graham—Just two other very brief comments to make about that too: first, our response is very much on an individual property basis, so it does not take into account the broader community; second, it is only a Wellington response. It seems to us there ought to be a fairly consistent approach, at least across this jurisdiction. That is the other reason that we are pushing for at least a state response and we are suggesting there ought to be Commonwealth involvement too so there is a bit of consistency around the whole nation.

But at least in Victoria we are thinking that there ought to be a similar response. It is not just at the property level, which is what our focus of attention has been. We do need to look at whole communities. We look at all the townships that we have got. We have been talking to our colleagues at East Gippsland about the future of places like Lakes Entrance, for example. The future of that place I do not think can only be left to individual property owners or the local municipality. We need to take a bit of a broader view, we think. Thanks, Chair.

CHAIR—Returning to the Mornington shire council's submission this morning, obviously the issue of community engagement is a very important part of the overall strategy. You refer to a document that was sent to households. Would it be possible for you to tender that as evidence for the committee?

Ms Schyschow—I will table a number of documents.

CHAIR—Any questions to the Mornington shire representative? We heard from the Western Port alliance this morning, so we had a bit of a feeling about what was going on there. In terms of recommendations to this committee for further action, would you like to make some suggestions about how the federal government may be able to assist into the future?

Ms Schyschow—The two that I talked about before were much the same as what Mr Webb and Mr Graham have been talking about. The CSIRO, with the federal government money, has done that modelling and it needs to be revised with the new data that is coming through. But also, because that is from the coastal side, we need to overlay the rainfall and run-off coming down to have a look at the levels of inundation and mapping those, and have a look at what we do with the planning scheme.

This is out of my area of expertise—I am not a planner—but just recently we have been out on exhibition, setting different levels in Mornington and the Tanti Creek area, to try and address some of these things. In terms of the issue that Mr Webb talked about—'In 20 years will something hold up?'—we asked one of our developers to do some modelling in one particular area. Now the CSIRO results are a little bit different and, if we were doing it today, some three or five years later, it would have been a higher flood control level. So there does need to be some consistency. If the federal government were to provide some funding for the good science that we do need to set those controls, that would be a great assistance.

The second point was that we have done our risk assessment. We have done various risk assessments there, with infrastructure and emergency management control, and in the infrastructure area I think that we are going to need a significant level of funding in the future in the coastal areas. The council is considering a percentage in the budget and asking its ratepayers

to start funding climate change responses. I do think that is where the federal government can help.

Going back to the communications, the federal government has given us \$300,000 to help with an eco display centre, and when those in the 20 to 40 age group are building or renovating a house, we are trying to show them the various options there. The federal government has helped us in many areas but those two areas are really important: the science and the infrastructure.

CHAIR—At that point, seeing we are running a little bit over time, I would like to thank the representatives from Wellington and Mornington shire councils for their attendance. The secretariat will send you a copy of the transcript for any corrections that need to be made. We would be grateful if you could also send on to the secretariat any additional material that you have undertaken to provide. If you could do that as soon as possible, that would be great. We conclude our public hearing.

Resolved (on motion by **Dr Washer**):

That this committee authorises publication of the transcript of the evidence given before it at public hearing this day.

Committee adjourned at 11.54 am