Submission to Productivity Commission Inquiry

Natural Disaster Funding Arrangements

Senator the Hon Doug Cameron

Senator for New South Wales

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I welcome the opportunity to make a submission on the Productivity Commission draft report on Natural Disaster Funding Arrangements (the draft report). Unfortunately I will not be able to appear at a public hearing as the hearing dates conflict with parliamentary sittings.

This submission builds on my previous submission and deals with key aspects of the draft report. The draft report raised further questions in my mind, particularly:

1. Is the scope of the inquiry too narrow?
2. Are key policy issues sufficiently identified?
3. What do Australians want from disaster funding arrangements?
4. Is there any evidence that recent levels of government disaster recovery funding have been excessive?
5. Is Commonwealth disaster funding really unsustainable?
6. Does the Productivity Commission's conceptual framework identify the key elements of natural disaster risk?
7. Will taking Commonwealth funding out of disaster recovery potentially expose the community to unintended consequences?
8. Is disaster funding really 'political opportunism' or a community preference to err on the side of being generous?
9. How realistic is a three year transition period?
10. Does the report give sufficient attention to the issue of the impact of climate change?

There is one recommendation I commend. That is Draft Recommendation 4.9; 'Insurers should provide additional information to households regarding their insurance policies, the natural hazards they face and possible costs of rebuilding after a natural disaster. This work could be led by the Insurance Council of Australia to ensure consistency in the provision of information across insurers.' The absence of this information has proven to be a significant issue arising from the 2013 Blue Mountains bushfires.

These questions and my views expressed in response to them in this submission are, for most part, based on my personal experience during the 2013 Blue Mountains bushfires and on my involvement on the Recovery Committee as a Senator for NSW.

1. **Is the scope of the inquiry too narrow?**

Firstly, I am disappointed that the issue of disaster response is deemed to be outside the scope of the inquiry Terms of Reference except where directly relevant to mitigation, relief and recovery and existing Commonwealth State joint funding arrangements for disaster response.

The funding of disaster response is fundamental to the economic and social capacity to rebuild communities affected by disasters, which is a form of disaster mitigation itself.

I also share the concerns expressed by stakeholders such as the Tasmanian Farmers and Grocers Association, the Far North Queensland Regional Organisation of Councils National Farmers Federation, the Government of South Australia and the Coastal Communities Protection Alliance — Wooli about the exclusion of other natural disasters (such as drought, heatwave and coastal erosion) from the Terms of Reference, (pages 196-7 of the draft report).

The fact that drought and heatwave are excluded from the NDRRA determination should be a matter of concern to the Productivity Commission not just a reason to narrow the scope of its inquiry. The increasing frequency and severity of the excluded natural disasters and those included in the Terms of Reference are as I understand them, inimical, therefore, the factors influencing funding for mitigation and recovery would be much the same. The basis for the exclusion of some types of natural disaster has not been made out in the draft report and I therefore call on the Productivity Commission to recognise the exclusion is artificial and that a holistic analysis of natural disaster funding is required.

Importantly, I note that the draft report does not take account of the lessons learned from recent natural disasters especially in the context of effective Commonwealth/State/Local government coordination. This matter is consistent with the Terms of Reference and would be worthy of more detailed analysis by the Productivity Commission in its final report.

I submit that the final report should take into account the following areas where improvements in disaster response can be made:

- The need for improved COAG coordination and overview of disaster response;

- Greater acknowledgement and use of the resources available through existing national disaster related mechanisms such as Disaster Resilient Australia[1] and bodies such as Australian Emergency Management;[2]
- The need to assess the effectiveness of the Natural Disaster Relief and Recovery Arrangements (NDRRA);
- More effective Federal Government engagement in disaster recovery;
- Availability of standard response manuals on issues such as asbestos removal, cyanide removal, safe demolition and tree removal following bushfires;
- The most effective use of Defence Force personnel and resources;
- Processes to overcome ineffective State and/or local government responses, and
- Agreements to ensure that constitutional demarcations do not impede effective and efficient recovery processes.

These are examples where improvements in disaster response could improve the capacity for local communities to recover quickly, thus increasing overall social and economic recovery. It would also ensure that a community affected by natural disaster is more quickly removed from the need to access government assistance, thus mitigating the cost of disaster recovery.

If the report does not provide more detailed analysis of the potential implications of climate change and natural disaster funding arrangements (see elsewhere in this report), then balancing climate change, economics and social outcomes will not be part of the conceptual framework when assessing appropriate natural disaster funding arrangements. Unless this is addressed in the final report the Productivity Commission will have failed in its obligations under paragraph 8 (1)(a) of the *Productivity Commission Act 1998* (Cth) (the Act) to have regard to the need:

> *"…to improve the overall economic performance of the economy through higher productivity in the public and private sectors in order to achieve higher living standards for all members of the Australian community."*[3]

Finally, while this is not criticism of the Productivity Commission or the report per se, I am perplexed by the Abbott Government's decision to review the funding arrangements for natural disaster as merely a function of 'economic performance'.
It was unfair of the Abbott government to expect the Productivity Commission to review and theorise (albeit in a draft report) about improvements to the funding models for the myriad of complexities of disaster mitigation, resilience and the disaster and emergency management without acknowledging and sufficiently engaging government and non-

[1] http://www.em.gov.au/DisasterResilientAustralia/Pages/default.aspx
[2] http://www.em.gov.au/Pages/default.aspx
[3] Paragraph 8 (1)(a) of the Productivity Commission Act 1998

government entities. IT is these entities that do such a sterling job in ensuring the safety and well-being of Australians who have faced and may in the future face the trauma of natural disaster.

2. Are key policy issues sufficiently identified?

In examining 'the efficacy of Australia's natural disaster funding arrangements' the draft report addresses three key policy issues:

- The amount of money spent on disaster mitigation.
- The amount of money spent on disaster recovery.
- The funding arrangements for working out the contribution of the various levels of government, business and private citizens.

Curiously, the Productivity Commission's logic appears to be that taking Commonwealth money out of disaster recovery produces more 'socially optimal outcomes' in the following three areas:

- It provides the wherewithal for the Commonwealth to put some additional money into disaster mitigation;
- It reduces government expenditure on disaster recovery, which according to the draft report is subject to over-investment, again, and
- It creates a stronger incentive for the State/Local government, businesses and private citizens to own the risks associated with their assets and manage these risks, thus infantilising the behaviour of these stakeholders.

These issues should be analysed separately in order to unpack any assumptions or biases in these areas.

2.1 Disaster mitigation expenditure

The Productivity Commission's call for a relatively small increase in government expenditure on disaster mitigation could be seen as a way to make a reduction in Commonwealth expenditure on disaster recovery more palatable to stakeholders.

However, if we assume this is not the case, it could be argued that, from a community-wide perspective, the socially optimal outcome in relation to disaster mitigation would be to ensure that the marginal cost of spending an extra dollar on disaster mitigation broadly equates with the marginal benefit. The question follows as to whether the current level of disaster mitigation expenditure is socially optimal.

This is something which the Productivity Commission is not best placed to answer. The final report should note that spending (or 'investment' as the draft report terms it) on mitigation should be subject to a thorough and expert cost-benefit analysis which recognises that while it may be difficult to put a dollar value on things like social cohesion it does not mean they have no value or that they cannot be quantified by means other than econometrics.

The draft report also suggests that overall government expenditure on mitigation is likely to be too low but the extent of the shortfall is unknown[4]. Despite the uncertainty, the draft report argues that the case for significantly increasing expenditure is not strong.

While the Productivity Commission has raised this as a potential area for funding it is quite a technical area and one in which, the Productivity Commission has no or limited expertise. I recommend that the final report makes clear the need for expert analysis of the projected costs of improved mitigation and commensurate funding increase, especially given that the draft report recognises the importance of disaster risk mitigation.

Given the uncertainty in this area and particularly in view of universally accepted concerns about the effects of climate change on the incidence and intensity of natural disasters (referred to in more detail elsewhere in this submission), an alternative approach would be for COAG to commission an independent assessment of disaster mitigation expenditure in Australia by experts in the field. The Productivity Commission's value-add could be in setting out what it sees as an appropriate economic and social framework to help inform the assessment.

A final observation in this area is that there is no compelling reason why increased funding for disaster mitigation should in any way be contingent on reduced government expenditure on disaster recovery. Disaster funding is not a zero sum game. Decisions to increase government expenditure on disaster mitigation should be based on merits in the budget

[4] Frequent references in the draft report highlight the paucity of data or the unavailability of evidence for the purpose of measuring expenditure on both mitigation and recovery. References such as "A comprehensive quantitative assessment of all the impacts is not feasible", 'Because of the inherent difficulties in valuing indirect and intangible costs, the Commission has not included these costs in its quantitative analysis', 'A comprehensive analysis of the costs and benefits of different funding arrangements is invariably limited, given many natural disaster costs cannot be accurately quantified. A partial assessment of the cost and benefits is the most pragmatic alternative, which is essentially the approach taken in this supplementary paper', 'No existing research has comprehensively examined the costs and benefits of different natural disaster funding arrangements', 'A number of reform impacts cannot be assessed quantitatively', and 'In light of these constraints, the most feasible and useful approaches is to focus on the trend in insurance loss over time – the average behaviour in insurance losses. The variation around the trend caused by the inherent volatility in the data is too random to be modelled accurately'.

context; where the net benefit to the community from increased expenditure can be assessed against the costs to the public purse.

2.2 Disaster recovery expenditure

The optimal outcome on disaster recovery expenditure is to try and ensure that the marginal cost of spending an extra dollar on disaster recovery broadly equates to the marginal benefit. The evidence about the current level of government expenditure in this area should be considered on its merits. The Productivity Commission appears to reach a strong conclusion on the basis of limited evidence presented in the draft report.

The draft report concludes that governments generally over-invest in the disaster recovery phase, but concedes the lack of analysis available on the costs of natural disasters, relying on insurance losses as the headline figure. The insurance loss of $29.395 billion over the period 1970 to 2013 underestimates the true cost of natural disasters in Australia. The evidence base for the view that governments over-invest in disaster recovery appears therefore to be largely based on the views of inquiry participants rather than any systematic analysis of recent natural disaster events.

Assessing the current level of public expenditure on disaster recovery primarily on the basis of the need to replace infrastructure assets is too narrow a frame and fails to fully reflect what the Australian community may expect natural disaster funding arrangements to achieve.

An alternative, evidence-based approach, would be for COAG to commission *ex post facto* evaluations of recent government expenditure on disaster recovery to test the conclusion that there has been over-investment by the Commonwealth government in the recovery phases.

The risk of the Productivity Commission getting this area of public policy wrong would have a significant negative impact upon a large number of individuals, businesses (either directly or through government action or inaction) and State and Territory governments. This risk should trigger a recommendation from the Productivity Commission that the perception of over-investment in disaster recovery should be tested by an expert body, particularly given the fact that there is paucity of evidence referenced in the draft report.

2.3 Funding arrangements for disaster mitigation and disaster recovery

The view expressed by the Productivity Commission that the Commonwealth Government should increase spending on mitigation is commendable, however as noted above this should not be done on the basis of a trade-off with recovery funding.

Given the extremely modest Australian government expenditure on recovery and given the vertical fiscal imbalance (VFI) between State and Commonwealth Government sources of revenue, a reduction in funding by the Commonwealth Government would lead to diminished recovery capacity. This is inconsistent with social and economic recovery. Also given the Deloitte Access Economics analysis that totals economic cost of natural disasters at $6.3 billion per year, it is clear that the Commonwealth Government's expenditure of $8 billion over the decade is modest and should not be used as a political excuse to cost shift recovery from the Australian Government to State Governments. The austerity approach of the Abbott government should not be allowed to diminish justifiable and effective government investment in rebuilding communities ravaged by natural disasters.

Further, the Productivity Commission's analysis of funding arrangements is heavily weighted toward the perceived incentives which Commonwealth funding creates for other stakeholders and the consequences which flow from this. Indeed, the draft report States:

> *"Funding arrangements matter, not because of their fiscal impact per se, but because of the incentives they create for natural disaster risk management."*[5]

This approach is influenced by a particular view of the role of government in this area. What constitutes a good funding arrangement should be a separate consideration to the amount of money governments should spend in an area. As with other areas of public policy, key criteria for assessing the relative merits of different funding arrangements include **equity, efficiency, effectiveness, simplicity, sustainability and policy consistency**. This type of framework is appropriate even in the case of policy areas involving more than one level of government. An advantage of such an approach is that it recognises that the attributes of good public policy are multi-dimensional and sometimes involve trade-offs. The Productivity Commission should therefore apply a broader set of key criteria to alternative funding arrangements, including making transparent any trade-offs that particular approaches may involve in its final report.

3. What do Australians want from natural disaster funding arrangements?

I expect that most Australians appreciate the importance of disaster relief funding as a means to an end and not an end in itself. It is therefore worth reflecting on the kinds of things the Australian community might consider important in identifying the best funding model. The possibilities include, a mechanism for pooling risk, alleviating human suffering, ensuring the timely restoration of crucial economic and social infrastructure services and ensuring communities have the resources and support they need to bounce back.

[5] Page 14 of the Draft Report

These types of considerations are relevant to any assessment of how well current arrangements are working and to making the case for change. The way forward for the Productivity Commission and for the Commonwealth Government in this area is to actively seek input from individuals and businesses about their expectations in this regard.

4. Is there any evidence that recent levels of government disaster recovery funding have been excessive?

In relation to the Natural Disaster Relief and Recovery Arrangements, the Draft Report says that some participants suggested that Australian Government cost-sharing arrangement with the States has gone beyond what could be considered a safety net. In this regard, I note that two of the three participants cited were Commonwealth Government departments (the Department of Finance, the Department of Infrastructure and Regional Development, page 70).

Much is also made of anecdotal examples of so-called 'groundhog day' i.e. where governments have spent money on rebuilding assets that only have to be replaced following another natural disaster. The Productivity Commission itself acknowledges that most of these examples were from Queensland and occurred in parts of that State which were subject to repeated flooding during the period 2010-2013. Basing a conclusion that there is systemic over-investment in disaster recovery is at the very least, questionable.

Given the opening Statement in the draft report that the Productivity Commission's approach to conducting the review was evidence based it is quite likely to also be misleading. In any case the draft report's fixation on the distinction between financial expenditure on mitigation and recovery is narrow in that the economic and social benefits of recovery expenditure are not analysed to any significant degree.

The Productivity Commission has drawn heavily on evidence presented in submissions. It would have been of great benefit had the inquiry used survey techniques to gauge community views as to what it sees as important about natural disaster funding arrangements and whether the community is of the view that recent levels of government support are excessive. This could have been designed to test, for example, whether there is any significant difference of opinion between those people living in areas recently affected by natural disasters and those living elsewhere. There is a risk in this type of inquiry that while all Australians potentially benefit from the government safety net in this area only a subset of individuals and organisations are likely to feel motivated to make a submission or participate in hearings.

As noted above, the draft report also draws attention to the fact that there is limited information about the relief and recovery expenditure outside of the NDRRA. I am concerned that the implications of the draft recommendations would put a greater obligation on State governments when the Productivity Commission concedes that there is limited information about State government expenditure.

The significant limitations identified by the Productivity Commission in assessing the future cost of natural disasters means that recommendations based on quantitative assessments must be treated with caution if not scepticism. This is an issue which must be resolved prior to the publication of the final report and recommendations.

5. Is Commonwealth natural disaster expenditure really unsustainable?

The Productivity Commission argues that current government natural disaster funding arrangements are not sustainable (box on page 2). The draft report estimates over the period 2003 to 2016 the Australian Government will have spent $13.7 billion on post-disaster relief and recovery – which consists of $8 billion to date and a further $5.7billion over the forward estimates period for past natural disaster events (see page 3).

If total expenditure by the Australian Government over the period 2002-03 to 2015-16 (inclusive),was around $4.349 billion,[6] its expenditure on post-disaster relief and recovery was only around 0.32 per cent of total Australian Government outlays over this period.

The following table shows the year-by-year total Australian government post-disaster expenditure as a percentage of GDP.[7] It is clear from these figures that 'on average', that is, over the decade, the Australian government paid out around only **0.06% of GDP per annum** for post-disaster related assistance.

Year	GDP ($m)	Assistance ($m)	%GDP
2002-03	$ 801,261	$ 83	0.010%
2003-04	$ 861,982	$ 47	0.005%
2004-05	$ 922,710	$ 68	0.007%
2005-06	$ 998,312	$ 69	0.007%
2006-07	$ 1,087,555	$ 104	0.010%
2007-08	$ 1,178,952	$ 67	0.006%
2008-09	$ 1,258,654	$ 453	0.036%
2009-10	$ 1,296,324	$ 197	0.015%
2010-11	$ 1,406,671	$ 3,711	0.264%
2011-12	$ 1,486,071	$ 3,091	0.208%
2012-13	$ 1,524,044	$ 268	0.018%
2013-14	$ 1,586,168	$ 2,058	0.130%

6 See Table 1 of Statement 10, Budget Paper No. 1 2014-15
7 Page 253 of the Draft Report and ABS catalogue 5206.0

I note that figure 1 on page 3 of the Draft Report shows that the projected expenditure on post-disaster relief and recovery in 2016 falls below $1 billion again as the impact of past disaster events washes out. On this basis it is hard to see how current levels of Australian Government expenditure on post-disaster relief and recovery could possibly be described as 'unsustainable'. The Productivity Commission cannot simply assert unsustainability; it must produce evidence to support its conclusion that Australian Government expenditure on post-disaster relief is not sustainable.

6. Does the PC's conceptual framework identify the key elements of natural disaster risk?

The Draft Report States that the 'overarching goal of the inquiry is to identify reforms to natural disaster funding arrangements that improve the living standards of Australians' and that this objective is grounded in the statutory requirement (as noted above) to 'have regard to the need:

> *"…to improve the overall economic performance of the economy through higher productivity in the public and private sectors in order to achieve higher living standards for all members of the Australian community."*[8]

This noble aim will not be achieved by downplaying other important factors which affect the ability of government, business and citizens to deal with natural disaster risk, such as the potential financial and social implications of climate change.

Simply imposing a neo-classical economic analysis on top of risk management theory is not a robust conceptual framework to underpin conclusions in relation to natural disaster funding arrangements.

In this regard I note that a key part of the Productivity Commission's conceptual framework appears to be the natural disaster risk triangle (see box 1.2 on page 49). The natural disaster risk triangle has three key elements: the probability of a natural hazard occurring (i.e. the hazard); the exposure of people, property and the environment to the hazard (i.e. exposure) and the vulnerability of people to the impacts (i.e. vulnerability). If the overarching concern of the Productivity Commission is the improvement of community living standards, it is not clear how the natural disaster risk triangle can be reconciled without the capacity to recover.

[8] At page 49

If the Productivity Commission's main concern in analysing natural disaster funding is community living standards then surely a key dimension of natural disaster risk is the capacity of people (or businesses or communities) to recover from a disaster. Risk is created not just by a hazard, by exposure to the hazard, by vulnerability to being adversely affected by the hazard but also the capacity to recover from a disaster.

To put it another way, if a community has a low capacity to recover then in terms of its living standards this would increase the risk associated with a natural disaster. In terms of the risk diagram it seems to me that capacity to recover is, akin to exposure and vulnerability, and is therefore amenable to information provision and mitigation strategies.

I also note that the conceptual framework asks questions about the 'ownership of risk' and it highlights the New South Wales Independent Pricing and Regulatory Tribunal submission (IPART)) which cited a hierarchy of responsibility for the cost of risk management. The acknowledgement of the IPART model in the draft report gives it credence and it implies that the Productivity Commission accepts the proposition that organisations which fail to mitigate the risk which they 'own' and which causes damage, the responsibility for such damage should be sheeted home to the owner of the risk, as was the case of the ownership of 2013 NSW State Mine Fire by the Department of Defence.

A matter not mentioned in the discussion about risk ownership is the question of the social and economic responsibility of Australian industries in emitting carbon dioxide and passing the costs of such emissions on to the taxpayer. An economically rigorous analysis of industry appetite for risks in increasing carbon dioxide levels into the atmosphere must be dealt with by the Productivity Commission in its final report.

7. Will taking Commonwealth funding out of disaster recovery potentially expose the community to unintended consequences?

While I acknowledge that governments across Australia do need to strike an appropriate balance in disaster funding, the conclusions reached in the draft report regarding changes to the extant funding arrangements would appear to hinge on the validity of the claim that governments are currently over-spending on disaster relief and recovery.

It is more than likely that reducing Commonwealth funding for disaster recovery will extend the period of recovery from a natural disaster for individuals and communities. The cost to individuals from a protracted recovery period could be an extended period of hardship, greater uncertainty and an exacerbation of post-disaster related conditions. The cost to communities could well include a reduced level of social amenity, eroded community cohesion and a reduced capacity to generate income from economic production.

As noted elsewhere in this submission no attempt has been made in the draft report to identify the post-disaster economic benefits to the nation of recovery expenditure, such as the need to provide on-going government assistance thus mitigating the cost of disaster recovery or through the raising of income and goods & services tax in the rebuilding phase. When examined from a risk perspective, any reduction in disaster recovery funding would have the consequence of limiting those economic benefits. This is a fundamental flaw in the draft report and should be addressed in the final report.

8. Is disaster funding really 'political opportunism' or a community preference to err on the side of being generous?

The Productivity Commission observes in the draft report that:

> *"…politicians can be quick to provide generous post-disaster assistance, which provides immediate, observable and private benefits to individuals. Over time, this bias creates entitlement dependency and undermines individual responsibility for natural disaster risk management."*[9]

On the contrary, it is more likely that politicians are in fact responding to a genuine community preference. Such action reflects a particular set of values, that is, to err on the side of being generous when people have suffered loss and hardship as a result of a natural disaster. In any case, the political imperative that politicians face in the event of a natural disaster to respond in a way that reflects the community's underlying values is unlikely to change even if the Productivity Commission's preferred approach is adopted.

I also call into question the view that the availability of government assistance in the event of a natural disaster is really distorting people's decision-making ability and creating a culture of dependency and that it defies the reality of the needs of Australian citizens who are victims of natural disaster.

Only those divorced from the practical implications of being left on the street for two days or longer, without access to accommodation, clothing, money or even bank accounts would see this payment as promoting a culture of entitlement. Given my experience in speaking to people directly and indirectly affected by the Blue Mountains bushfires in 2013, I find this is a highly patronising value judgement about the needs of people who have been adversely affected by natural disaster.

It is nonsensical that the current levels of natural disaster assistance are so generous that people are abrogating their personal responsibility to the extent that they are under-prepared, particularly in relation to insurance. It is more likely that this is a result of the

[9] Page 13 of the Draft Report

difficulty of assessing risk in this area and determining the optimal level of preparedness given that some risks are location specific.

I call on the Productivity Commission to re-think its assumptions about human behaviour and values in a post-disaster setting and reassess the notion that recipients of post-disaster payments have fallen victim to entitlement dependency.

9. How realistic is a three year transition period?

I am opposed to the draft proposals and even if they were adopted by government they could not be realised in the time frame proposed.

10. Does the report give sufficient attention to the issue of the impact of climate change?

The science on the existence and impacts of climate change is clear. Our pre-eminent scientific bodies including the CSIRO and the Bureau of Meteorology, the Australian Academy of Science and internationally renowned Australian climate scientists have warned about the implications of climate change.

The 2014 State of the Climate report, produced by the CSIRO and Bureau of Meteorology, warns of the increased likelihood of more frequent and more extreme weather events in Australia. Natural disasters that are likely to increase due to the impacts of climate change include bushfires, storms, floods and cyclones.

> *"There has been an increase in extreme fire weather, and a longer fire season, across large parts of Australia since the 1970s. Extreme fire-weather days have become more extreme at 24 of the 38 locations since the 1970s. The number of significant increases is greatest in the southeast, while the largest increases in the index occurred inland rather than near the coast. The largest increases in seasonal Forest Fire Danger Index occurred during spring and autumn, while summer had the fewest significant trends. This indicates a lengthened fire season."*[10]

The report states fire conditions such as continuous extreme heat, low rainfall and strong winds are beginning earlier in the year. It is clear as the impacts of climate change intensify, these conditions are becoming more common.

The scientific projections suggesting increased frequency and intensity of some extreme weather events and potentially natural disasters are not adequately addressed in Volume 1 of the draft report. It is therefore remarkable that the Terms of Reference make no

[10] http://www.csiro.au/Outcomes/Climate/Understanding/State-of-the-Climate-2014/Heatwaves-and-Fireweather.aspx

mention of the implications of climate change in Volume 1 of the draft report. I am pleased to note that Volume 2 at least acknowledges climate change will make natural disaster prediction a difficult task:

> *"It is difficult to predict accurately how many natural disasters will occur in the future. This difficulty is further compounded by climate change and its uncertain impact on the frequency and intensity of extreme weather events."*[11]

I also note there is recognition in Volume 2 of international efforts to factor the effects of climate change on disaster prediction. In this regard I draw the Productivity Commission's attention to Statements by the President of the United States of America, Barack Obama to the 'State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience' about the threat of climate change and the importance of mitigation and resilience to the economy:

> *"More severe storms and increased flooding threaten roads and bridges and businesses. Rising sea levels threaten coastal communities and ports.*
>
> *So climate change poses a direct threat to the infrastructure of America that we need to stay competitive in this 21st-century economy. That means that we should see this as an opportunity to do what we should be doing anyway, and that's modernizing our infrastructure, modernizing our roads, modernizing our bridges, power grids, our transit systems, and making sure that they're more resilient. That's going to be good for commerce and it's obviously going to be good for communities."*[12]

Secondly, to the recent United Nations Climate Summit:

> *"For all the immediate challenges that we gather to address this week—terrorism, instability, inequality, disease – there's one issue that will define the contours of this century more dramatically than any other, and that is the urgent and growing threat of climate change."*[13]

Further I note that that the Productivity Commission's own report, *Barriers to Effective Climate Change Adaptation* (PC 2012) recommends a review of natural disaster relief and recovery arrangements on the basis of climate change. It would therefore be socially and economically irresponsible and quite frankly bizarre, for the Productivity Commission not to give due weight to the implications of climate change on natural disaster funding arrangements.

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[11] Page 234 of the Draft Report
[12] http://www.whitehouse.gov/blog/2014/07/16/preparing-communities-impacts-climate-change
[13] http://www.whitehouse.gov/blog/2014/09/23/president-obama-no-nation-immune-climate-change

Given this recognition by the international community and by the Productivity Commission itself of the significant potential impact that climate change will have on disaster prediction and its economic and social implications for natural disaster funding arrangements, it is imperative that the lack of focus on this issue be addressed in the Productivity Commission's final report.
