SUBMISSION

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Natural Disaster Funding

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SUMMARY OF RECOMMENDATIONS

The following is a summary of recommendations by the National Sea Change Taskforce in relation to the Productivity Commission inquiry into *Natural Disaster Funding:*

Recommendation 1 – Focus on resilience

Assist Australia's coastal councils to manage the threats posed by extreme weather events through the allocation of additional funding for pre-disaster mitigation and resilience, as recommended by the Australian Business Roundtable for Disaster Resilience and Safer Communities.

Recommendation 2 – Institutional arrangements

It is proposed that the Australian Government play a leadership role in developing a coordinated national approach to natural disaster mitigation, resilience and recovery by adopting the following policy initiatives:

- A collaborative national approach to natural disaster funding, involving all three tiers of government, through the COAG Law, Crime and Community Safety Council;
- An intergovernmental agreement defining the roles and responsibilities of each tier of government in relation to natural disaster planning and funding.

Recommendation 3 – Disaster Resilience Plan

Develop a Disaster Resilience Plan to identify areas at particular risk of natural disaster impacts in each State and Territory. The Disaster Resilience Plan would provide guidance on specific land use planning policies and building codes to minimise the risk of damage and injury in vulnerable areas resulting from natural disasters.

Recommendation 4 – Consistent land use planning policies

Establish a consistent national approach to planning policy and land use, with the participation of Australian, State and Territory governments, and local government. Current approaches to land use planning are inconsistent and have the perverse effect of placing an increasing number of people at risk of natural disasters through the location of residential developments in potentially vulnerable locations.

Recommendation 5 – More stringent building codes

Review building codes to 'disaster-proof' buildings in areas considered particularly vulnerable to the impact of natural disasters such as more frequent and severe extreme weather events in Australia's coastal areas.

INTRODUCTION

This submission to the Productivity Commission inquiry into *Natural Disaster Funding* has been prepared by the National Sea Change Taskforce Inc. (the Taskforce). For more information about the organisation see page 11.

The Taskforce believes it is timely and important to undertake a comprehensive review of current arrangements for emergency management, preparedness, response and funding. The inquiry has the potential to make a significant contribution to increasing the resilience of local communities to the impacts of natural disasters. The potential impact of natural disasters is of particular concern to coastal communities. As the tier of government with the least financial and professional resources, local government is faced with complex governance and institutional arrangements which currently act as a barrier to effective emergency management and mitigation.

As indicated in this submission, Australia's coastal councils are at the forefront of efforts to deal with the impact of natural disasters such as floods, storms, cyclones and bushfires. Responding effectively to these challenges in the absence of effective policy settings and adequate resources is a major challenge for local councils. To put this issue into perspective, it is worth noting that the Australian coastal zone is home to the nation's state capitals and to more than 85% of the national population. Most of Australia's industrial assets are located in coastal areas and many coastal communities outside the capital cities are attempting to deal with some of the highest growth rates in the nation.

Major natural disasters such as the Victorian bushfires in 2009 and the Queensland floods of 2010-11 have highlighted the pivotal role played by local government in providing leadership of community efforts to respond to emergencies on an unprecedented scale. From evacuating residents in the path of rising flood waters, to the massive task of cleaning up the mud and debris and helping to accommodate those who have lost their homes, local councils have been at the forefront of efforts to help their residents through the crises.

As extreme weather events in recent years have highlighted, Australia's coastal settlements, infrastructure and environment are at continuing risk from extreme weather events and inundation. In addition, the courts have made it clear that the risk of sea level rise and more severe and frequent extreme weather events need to be taken into account in coastal planning and management throughout Australia.

The Taskforce believes that a greater investment in disaster resilience plus planning policies to restrict property development in areas at particular risk of inundation and more stringent building codes will reduce the potential cost and impact of future natural disasters in Australia's coastal communities.

1. FOCUS ON RESILIENCE

The reform options outlined in the Productivity Commission issues paper for the inquiry into natural disaster funding include an option to lower Commonwealth contributions for infrastructure funding to either 25 or 33 per cent of government contributions, with state and local governments to share the remaining reconstruction costs.

The Taskforce contends that local government authorities do not have the resources or capacity to increase their share of post-disaster recovery costs. As indicated in the findings of a research project commissioned by the Taskforce and conducted by the Planning Research Centre at The University of Sydney, coastal councils already report infrastructure shortfalls and lack the capacity to finance these shortfalls through existing sources (grants, rates and development contributions)[1].

Rather than shifting a greater proportion of post-disaster recovery costs to local government, the Taskforce believes it would be more cost-effective and productive to adopt the approach proposed in the White Paper titled *Building Our Nation's Resilience to Natural Disasters*, produced by Deloitte Access Economics for the Australian Business Roundtable for Disaster Resilience and Safer Communities, which was released in June 2013[2]. The Roundtable, formed by Insurance Australian Group, Westpac, Optus Australia, Munich Re, Investa Property Group and Australian Red Cross, proposes that the *'budgetry impact of responding to and recovering from natural disasters could potentially be significantly reduced through carefully considered and directed investment in pre-disaster resilience*.

The White Paper identifies that an '*annual program of Australian Government expenditure on pre-disaster resilience of $250 million at the national level has the potential to generate budget savings of $12.2 billion for all levels of government (including $9.8 billion for the Australian Government) and would reduce natural disaster costs by more than 50% by 2050.'* This could be achieved by increasing the allocation of funding through the Natural Disaster Resilience Program from the current level of approximately $27 million annually.

The case studies outlined in the White Paper highlight the need for a new approach to tackle the potential risks associated with natural disasters including: *'Prioritisation of mitigation and investment options based on appropriate economic value and risk assessment. This includes finding mechanisms that allow key investment decisions to be taken at a localised level, often property by property. Those decisions can be supported by government through the provision of information and incentives and by the private sector through price signals that reflect the risks involved.'*

Recommendation 1 – Focus on resilience

Assist Australia's coastal councils to manage the threats posed by extreme weather events through the allocation of additional funding for pre-disaster mitigation and resilience, as recommended by the Australian Business Roundtable for Disaster Resilience and Safer Communities.

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[1] Gurran, N., Squires, C. and Blakely, E. (2005), *Meeting the Sea Change Challenge: Sea Change Communities in Coastal Australia,* The University of Sydney Planning Research

[2] Australian Business Roundtable for Disaster Resilience and Safer Communities (2013), *Building our Nation's Resilience to Natural Disasters.*

2. MORE EFFECTIVE INSTITUTIONAL ARRANGEMENTS

National leadership is required in order to achieve a more efficient and cost-effective approach to minimising the risk of natural disasters to the people and property of coastal Australia. As witnessed during the summer of 2010-2011 and again in early 2013, major storms and flooding events along the coast have had devastating consequences for many people living in coastal communities.

The report of the Productivity Commission inquiry into *barriers to effective climate change adaptation*, released in March 2013, stated: *'Recent inquiries into natural disasters have found that resourcing constraints can lead to poor coordination across councils. This impacts on the provision of emergency services. For example, the Queensland Floods Commission of Inquiry (2011) suggested that less well-resourced councils have struggled to respond to the 2011 floods due to a shortage of staff trained in emergency management, lack of coordination among councils staff and no contingency planning included in councils' disaster management plans.'* The report further states: *'Recent reviews have found that inadequate definition of roles and responsibilities contributed to shortcomings in emergency management that affected the community's response to natural disasters.'*

The Council of Australian Governments has also identified there is an *'urgent need for governments to re-examine Australia's arrangements for managing natural disasters and identify any further strategies aimed at building greater resilience'*. COAG noted such efforts would be critical to Australia's ability to deal with the expected increase in the frequency and severity of natural disasters arising from extreme weather events[3].

The National Sea Change Taskforce proposes that the current ineffective arrangements be addressed by establishing a collaborative national approach, involving the three tiers of government through the COAG Law, Crime and Community Safety Council. The Taskforce also proposes an intergovernmental agreement between Commonwealth, State, Territory and local governments to clearly define the roles and responsibilities of the three tiers of government in relation to natural disaster mitigation and recovery. Such an agreement would require the States and Territories to develop a Disaster Resilience Plan, as indicated in the next section of this submission, as a means of securing Commonwealth funding for coastal works to mitigate the potential impacts of extreme weather events. This would have the potential to significantly reduce the Australian Government's exposure to the substantial costs involved in disaster recovery, as indicated in the previous section on the need for a greater focus on resilience.

Recommendation 2 – More effective institutional arrangements
It is proposed that the Australian Government play a leadership role in developing a coordinated national approach to natural disaster mitigation, resilience and recovery by adopting the following policy initiatives:

- A collaborative national approach to natural disaster funding, involving all three tiers of government, through the COAG Law, Crime and Community Safety Council;
- An intergovernmental agreement defining the roles and responsibilities of each tier of government in relation to natural disaster planning and funding;

[3] COAG (2007) *National Climate Change Adaptation Framework*, p.19

3. DISASTER RESILIENCE PLAN

Finding feasible solutions to dealing with natural disaster risks will become increasingly urgent in the face of rapidly expanding coastal communities. Over the next 50 years the National Sea Change Taskforce has projected that the population in Australia's coastal areas will increase by 77% - from 6.9 million to 12.2 million. (Details of this projection are outlined at Appendix A.)

The scale of projected population increase by 2050 highlights the need for a Disaster Resilience Plan as an integral part of a natural disaster mitigation policy. One of the objectives of such a plan would be to reduce the development of urban settlements in areas that are vulnerable to the impact of natural disasters. The consequences of allowing intensive development to occur in such vulnerable areas have been clearly demonstrated in the major flooding events in Queensland in early 2011. Other critical objectives would be to ensure that adequate provision is made to meet projected demand for infrastructure and services and to prevent the loss of productive agricultural land in the coastal zone.

The Disaster Resilience Plan would be a key element of an intergovernmental agreement defining the roles and responsibilities of each tier of government in relation to natural disaster planning and funding. Under the terms of the agreement each state and territory would be required to identify areas at particular risk of natural disaster impacts and specify the measures necessary to mitigate those risks, including appropriate land use planning policies and building codes

The need for such cross jurisdictional coordination is evident. Gurran, Squires and Blakely (2005: 59) state that Australia's national responses to planning policies are *'partly due to an historic devolution of environmental responsibility to the States under the Australian Constitution. However, the Commonwealth has an important indirect influence on environmental policy and planning through its funding, taxation, and international trade powers. It can play an important role in national policy making, by setting policies directly and through national government councils such as the Council of Australian Governments and the Natural Resource Ministerial Council.'* The Taskforce contends that the Commonwealth has a critical role to play in relation to national policy making in respect of natural disaster mitigation.

Recommendation 3 – Disaster Resilience Plan

Develop a Disaster Resilience Plan to identify areas at particular risk of natural disaster impacts in each State and Territory. The Disaster Resilience Plan would provide guidance on specific land use planning policies and building codes to minimise the risk of damage and injury in vulnerable areas resulting from natural disasters.

4. CONSISTENT LAND USE PLANNING POLICIES

Current approaches to land use planning are inconsistent and have the perverse effect in parts of Australia of placing an increasing number of people at risk of natural disasters through the location of residential developments in potentially vulnerable locations. Current policy settings also have the effect of increasing the financial exposure of the Commonwealth Government to disaster recovery funding.

State governments in NSW and Queensland have recently revoked existing planning guidelines which incorporated a requirement to take projected sea level rise into account in the assessment of development applications in coastal areas. It is inevitable that as a consequence an increasing number of residential properties will be developed in vulnerable, low-lying coastal areas and exposed to the potential impact of natural disasters.

As Professor Barbara Norman, Foundation Chair of Urban and Regional Planning at Canberra University, points out: *Nearly 39,000 homes are located within 110 metres of soft, erodible shorelines, according to the Australian Department of Environment, which states exposure to the effects of sea level rise 'will increase as Australia's population grows'. With 85% of Australians living in coastal areas, and billions of dollars of buildings and roads at stake, if we don't get coastal planning right we risk facing huge human and economic costs*[4].

The Local Government Association of Queensland has also warned that councils could be 'sent broke' by the Queensland government policy change, as a result of the legal risks they could face through the approval of coastal developments that are subsequently inundated by storm damage or flooding. Queensland's previous planning policy had factored in a sea level rise of 30cms by 2050 and 80cms by 2100, which meant that coastal development in vulnerable areas was generally only permitted in special circumstances, such as for marine and fishing precincts.

As Professor Norman points out: *In two short years we have gone from a situation where all Australian governments were working together on a national approach to coastal planning, under the former National Coasts and Climate Change Council, to a trend towards dumping the risks and liabilities for coastal planning onto local councils. This is already leaving some communities very exposed to rising costs. For instance, the Gold Coast is already hit by beach erosion costing tens of millions of dollars to remedy*.

Professor Norman concludes that: *Changes in sea level rise policy increase the likelihood of more development in areas at risk of coastal erosion, sea level rise and storm surges. Unless this changes, who'll pay the price for this lack of foresight and planning? If you're an Australian taxpayer, you will, and in the future so will your children.*

The approval of a housing development for approximately 1000 dwellings on a floodplain at Carrara, on the Gold Coast in Queensland, provides a good example of the current dysfunctional arrangements that apply to land use planning in potentially vulnerable coastal locations. On 19 July, 2013, the Gold Coast Bulletin reported that: '*Residents of a proposed*

[4] Norman, B. (2013) *Scrapping Sea Level Protection Puts Australian Homes at Risk*, The Conversation, 11 December 2013 http://theconversation.com/scrapping-sea-level-protection-puts-australian-homes-at-risk-21271 (Sourced 29 May 2014)

Gold Coast development on a cow paddock may be told to 'man the lifeboats' and prepare to abandon their homes in a flood. The development, on the Carrara floodplain, has caused considerable pain to city councillors who say they have no choice but to approve the almost 1000-dwelling project because a legal precedent has been set[5].

The Gold Coast City planning committee is reported to have recommended *'preliminary approval but councillors say they had no choice because of a legal precedent for the nearby Aurora Development.'*

The Emergency Plan for the development requires the following:

- Emergency rooms for marshalling
- Two small boats
- Two coxswains (boat skippers)
- Safe water supply for three days
- Satellite communication
- Tractor and trailer
- Fuel supply
- Flood-free helipad
- Resident education packs
- Annual drill
- Warning lights during flood events.

Recommendation 4 – Consistent Land Use Planning Policies

Establish a consistent national approach to planning policy and land use, with the participation of Australian, State and Territory governments, and local government. Current approaches to land use planning are inconsistent and have the perverse effect of placing an increasing number of people at risk of natural disasters through the location of residential developments in potentially vulnerable locations.

[5] Gold Coast Bulletin, 19 July 2013 *Development must have lifeboats*

5. MORE STRINGENT BUILDING CODES

One of the most destructive natural disasters to occur in Australia in the 20th Century was Cyclone Tracy, a tropical weather depression which devastated the city of Darwin in December 1974. As the National Archives record: '*With the cyclone's passing 65 people were killed (including 16 lost at sea) and many more were injured, 70 per cent of Darwin's homes were destroyed or suffered severe damage, and all public services – communications, power, water and sewerage – were severed*[6].

In response to the disaster a new, more stringent building code was developed for the City which has since been adopted nationally for cyclone-prone areas. The code includes a requirement that buildings be clad to protect them against flying debris. They are also required to have roofing tied to the foundations.

It is recommended that a similar approach be adopted for building codes in order to 'disaster-proof' buildings in areas assessed as being at particular risk of the impact of natural disasters, such as more frequent and severe extreme weather events in Australia's coastal areas. The Taskforce believes that the combination of planning policies to limit property development in areas at risk of inundation and the introduction of more stringent building codes will reduce the potential impact of future natural disasters both to people and property in coastal areas.

Recommendation 5 – More stringent building codes

Review building codes to 'disaster-proof' buildings in areas considered particularly vulnerable to the impact of natural disasters such as more frequent and severe extreme weather events in Australia's coastal areas.

[6] National Archives of Australia (2014) *Cyclone Tracy – Darwin Fact Sheet 176*

ABOUT THE NATIONAL SEA CHANGE TASKFORCE

The National Sea Change Taskforce was established in 2004 as a national body to represent the interests of coastal councils. The role of the Taskforce is to provide support and guidance to coastal LGAs. Funding for the Taskforce's activities is derived from membership fees.

It was recognised at an early stage that an advocacy campaign needed to be supported by solid and credible research. In 2005 the Taskforce commissioned the first stage of an on-going research project to identify the priority issues facing coastal communities. The second stage of the research project, conducted by the Planning Research Centre at The University of Sydney, identified best practice models of local and regional planning for sea change communities. The third research project, titled *Planning for Climate Change: Leading Practice for Sea Change Communities in Coastal Australia*, was released in July, 2008 and identified best practice measures for responding to the impact of climate change on coastal communities. The fourth and most recent research project, titled *Planning for Climate Change Adaptation in Coastal Australia: State of Practice,* was released in early 2012.

In 2013 the Taskforce released the findings of a major study by The University of Adelaide on the impact of non-resident populations in coastal communities. Following the release of the study the Taskforce has been working with the Australian Bureau of Statistics to develop a proposed set of questions for the next Census aimed at gathering data on the ownership and use of second residences. In 2013 the Taskforce also released the findings of a study aimed at assisting coastal councils to retain the values and character of coastal communities. The project was undertaken by Curtin University.

The findings of the Taskforce research reports have influenced the development of coastal policy at a Federal, State and local government level.

Through an on-going advocacy campaign the Taskforce has placed the key issues facing coastal communities, including the impact of rapid growth, natural disasters and ageing populations, on the national political agenda. The Taskforce has also successfully engaged with Federal Governments on behalf of coastal councils and their communities.

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APPENDIX A – PROJECTED COASTAL POPULATION GROWTH

The third Intergenerational Report, released by Treasury in February 2010, estimated the national population would increase by 64% to reach 36 million by 2050. This is 8 million higher than previously estimated in the Intergenerational Report 2007 and 14 million higher than the national population in 2010. The National Sea Change Taskforce has analysed the figures and considered the impact on coastal communities outside the capital cities.

Projections by Infrastructure Australia, Major Cities Unit (Infrastructure Australia 2010) indicate that the capital cities are likely to grow from 14 million to 23.7 million over the next 40 years – an increase of 9.7 million people[7]. This means the remaining 4.3 million people of the projected increase will need to be accommodated elsewhere. The most likely scenario is that they will seek to settle in coastal areas outside the capital cities. This projected growth is in addition to the one million 'baby boomers' planning to retire to coastal areas between 2010 and 2026. The combined effect of this growth is projected to increase population in coastal areas by an estimated 77% by the mid 2050s - from 6.9 million to 12.2 million. The current resource base of LGAs in coastal areas is inadequate to meet the level of demand for economic, social and environmental infrastructure that will be generated by growth of this magnitude.

This situation is compounded by the current methodology for collecting population data in the census, which understates the number of people who depend on basic infrastructure and services in coastal communities. The census is conducted at five yearly intervals in the middle of the week during winter. As a result it does not capture data on the large number of people who would otherwise be in these communities at other times of the year. This places coastal councils at a significant disadvantage in keeping pace with the continuing increase in demand for local community infrastructure and services, and at meeting the considerable costs involved in rebuilding or relocating infrastructure such as roads, water and sewerage systems to withstand the projected impacts of natural disasters.

[7] Infrastructure Australia, Major Cities Unit (2010), *State of Australian Cities 2010*, Canberra