Conflicting World Views: Disjuncture between Climate Change Knowledge, Land Use Planning and Disaster Resilience in Remote Indigenous Communities in Northern Australia[1]

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This paper examines the links between emergency management and land use planning in four remote Indigenous communities in tropical northern Australia and the extent to which such linkages produced better disaster resilience in these communities. The case study communities were chosen because they are in locations likely to experience increased frequency and/or intensity of extreme weather events, both slow (sea level rise, drought) and rapid onset (storm surges, cyclones, floods) as a consequence of climate change. We compared land use planning legislation, state level planning policies, statutory planning schemes, property registration systems and emergency management systems. We found a clear disjuncture between understanding the likely impacts of climate change and the collection of emergency management data and the consideration of hazards and risks in land use planning systems. We conclude that the land use planning systems in tropical northern Australia are still geared toward promoting and facilitating development and have not evolved sufficiently to take account of climate change impacts, including sea level rise. This disjuncture is particularly evident in the context of remote Indigenous communities in Australia and reforms to land use planning systems are urgently required to address this disjuncture.

Keywords: *Climate change, emergency planning, land use planning, remote Indigenous communities.*

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Northern Australia is already highly exposed to a number of natural hazards including: cyclones and associated storm surges, riverine and flash flooding, heatwaves, coastal erosion, bushfires and drought - some of which might be exacerbated by climate change. This region is home to more than 110,000 Aboriginal and Torres Strait Islander people (Carson et al., 2009), of which, approximately half live within 20 kilometres of the coast or on offshore islands (Green et al., 2009).

In light of the above, a research project funded by the National Climate Change Adaptation Research Facility (NCCARF) was undertaken in four remote, northern Australian communities in 2012-13 with various exposures to extreme weather events, climate variability and climate change (Bird et al., 2013). This paper draws on information from this project (Bird et al., 2013) with a critical focus on the relevance of linkages between emergency management, land use planning and disaster resilience in relation to climate change adaptation. The paper aims to establish how land use planning can play a more effective role in reducing the physical vulnerability of coastal Indigenous[2] communities to sea level rise and high tidal surges arising from climate change impacts. We did this by undertaking a comparative analysis in the three jurisdictions affecting the case study communities, comparing land use planning legislation, state level planning policies, statutory planning schemes, property registration systems and emergency management systems.

The first section of this paper provides a brief description of the NCCARF project and introduces our four case study communities. The second section of this paper briefly summarises the predictions, risks and concerns about the likely impacts of sea level rise in northern Australia. The third section discusses the governance of emergency management, land use planning and Indigenous policy responsibilities in Australia's federal system of government and its role in facilitating disaster resilience. The fourth section discusses current land use planning and climate change adaptation in northern Australia and its contribution towards disaster resilience at the community level. The fifth section discusses the comparative analysis of the land use planning emergency management systems in northern Australia to see whether they are geared toward improving disaster resilience in remote and discrete Indigenous communities in northern Australia. The final section concludes with a summary of our findings and the need for urgent policy reform.

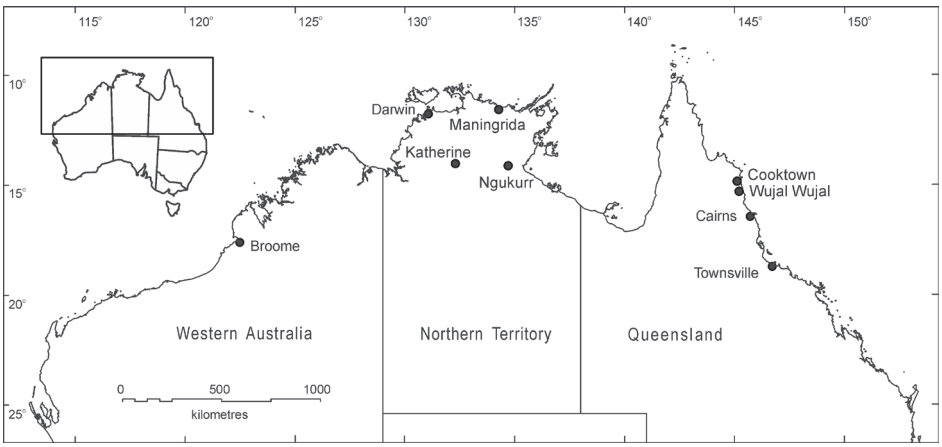
THE NCCARF PROJECT AND OUR CASE STUDY COMMUNITIES

The aims of the NCCARF project were to examine the underlying vulnerabilities, adaptive capacities and population movements of Indigenous people in the communities of:

- Maningrida, a low-lying coastal community in West Arnhem Land in the Northern Territory (NT). The traditional land owners for Maningrida are the Gunavidji people.

- Ngukurr, an inland community in the central southern region of Arnhem Land in the NT. Yugul Mangi are the people belonging to the Indigenous language groups of the lower Roper River and Gulf of Carpentaria regions of southeast Arnhem Land, which encompasses Ngukurr.
- Wujal Wujal, a coastal community in the Wet Tropics Region of far north Queensland (Qld), that serves the Eastern Kuku Yalanji people.
- Broome, a low-lying coastal township on the Dampier Peninsula of the Kimberley region in Western Australia (WA). The traditional owners of the region encompassing the township of Broome are the Yawuru people (See Figure 1).

Figure 1: Case study locations, Northern Australia



Map produced by Adella Edwards, James Cook University.

The first three case study communities are considered very remote and small communities, ranging between approximately 270 people to 2,300 people with very high proportions of the population identifying as Aboriginal or Torres Strait Islander (84 to 90 per cent). In comparison, Broome is a township with a population of approximately 12,766 people, of which 2,875 people (22.5 per cent) identify as Aboriginal or Torres Strait Islander (ABS, 2011). In 2011, Nyamba Buru Yawuru Ltd (NBY) conducted a household survey of the Indigenous population of urban Broome which found that the total de jure indigenous population of Broome was 3,620 people (or 28.3 per cent) of the 2011 Census population of urban Broome.[3]

The case study communities were chosen because they are in locations likely to experience increased frequency and/or intensity of extreme weather events, both slow (sea level rise, drought) and rapid onset (storm surges, cyclones, floods) as a consequence of climate change. The case studies also included the investigation of Indigenous perspectives on risks from seal level rise, high tidal surges and flooding,

and this information was gathered through direct interviews, observations, workshops or on-country[4] activities involving more than 150 people (see Bird et al., 2013). This paper also includes residents' perceptions of associated issues to provide a local level context.

PREDICTIONS, RISKS AND CONCERNS ABOUT THE LIKELY IMPACTS OF SEA LEVEL RISE IN NORTHERN AUSTRALIA

Research has shown that climate change related sea level rise is already impacting on northern Australia (e.g. see Green et al., 2009) with sea level rising at variable rates around the coast. Between January 1993 and September 2011, sea level has risen 6-8 mm around the coastal region of Wujal Wujal in Far North Queensland; 8-9 mm around the Broome and Maningrida regions; and, up to 12 mm around the Gulf of Carpentaria (east of Ngukurr) (CSIRO and The Australian Bureau of Meteorology, 2012). Significantly, estimates suggest that sea level rise will continue around northern Australia, with an average increase of at least 790 mm by 2100, a situation compounded by king tides and storm surges associated with cyclonic activity (Green et al., 2009).

In general, respondents are concerned about sea level rise with many already noticing changes: "…it's [sea level has] risen a bit, for all the years that we've been down here. Like, we've been down there 18 years now". In Broome, respondents noted that "high tide, sea levels rise, cyclones and 3m surge happening" and that "Broome is very vulnerable". While it is acknowledged that "the old people can read the actual changes", some feel that current changes are "unpredictable", and that the current generation is seen as ill-equipped to deal with changes as they are losing knowledge of how to adapt – knowledge that was once passed down from generation to generation.

Alone, sea level rise poses further threats to infrastructure within the coastal communities of Broome and Maningrida, while impacting on coastal and estuarine ecosystems important to each of the four case study locations. Moreover, the impacts of sea level rise will be exacerbated by cyclones and seasonal flooding, which themselves are subject to change in frequency and/or intensity under a changing climate. Such changes are likely to have a detrimental effect on the abundance or composition of native flora and fauna. Due to strong cultural connections between Indigenous Australians and their land and sea country, changes in biodiversity or biodiversity loss, are in turn, likely to effect the well-being of Indigenous communities (Green et al., 2009). Understandably, these issues worry local residents who are particularly concerned about how factors like bush tucker will be affected when: "...we have lots of water coming in you know, more water from the sea".

The consequences of sea level rise are already apparent with erosion and saltwater intrusion prominent in some coastal areas. Respondents in Broome commented

on landscape changes such as erosion resulting from sea level rise: "There's a lot of pressures on the… coastal cliffs which are eroding". Similarly, a resident of Ngukurr has noticed dramatic changes to the coastal area between 1980 and 2010: "I used to go down to Wuyagiba down on the coast and what they call the bottom road where I used to come in before, it's now just tidal flats". While drinking water is easy to access in places around West Arnhem Land: "you dig up anywhere here, you can get fresh water", community members recognise that "if we don't have the good weather, it [fresh water sources] will go back to salt again". Nevertheless, some Broome respondents showed a degree of fatalism about sea level rise affecting their homes: "we don't have concerns at this stage… I live day-by-day".

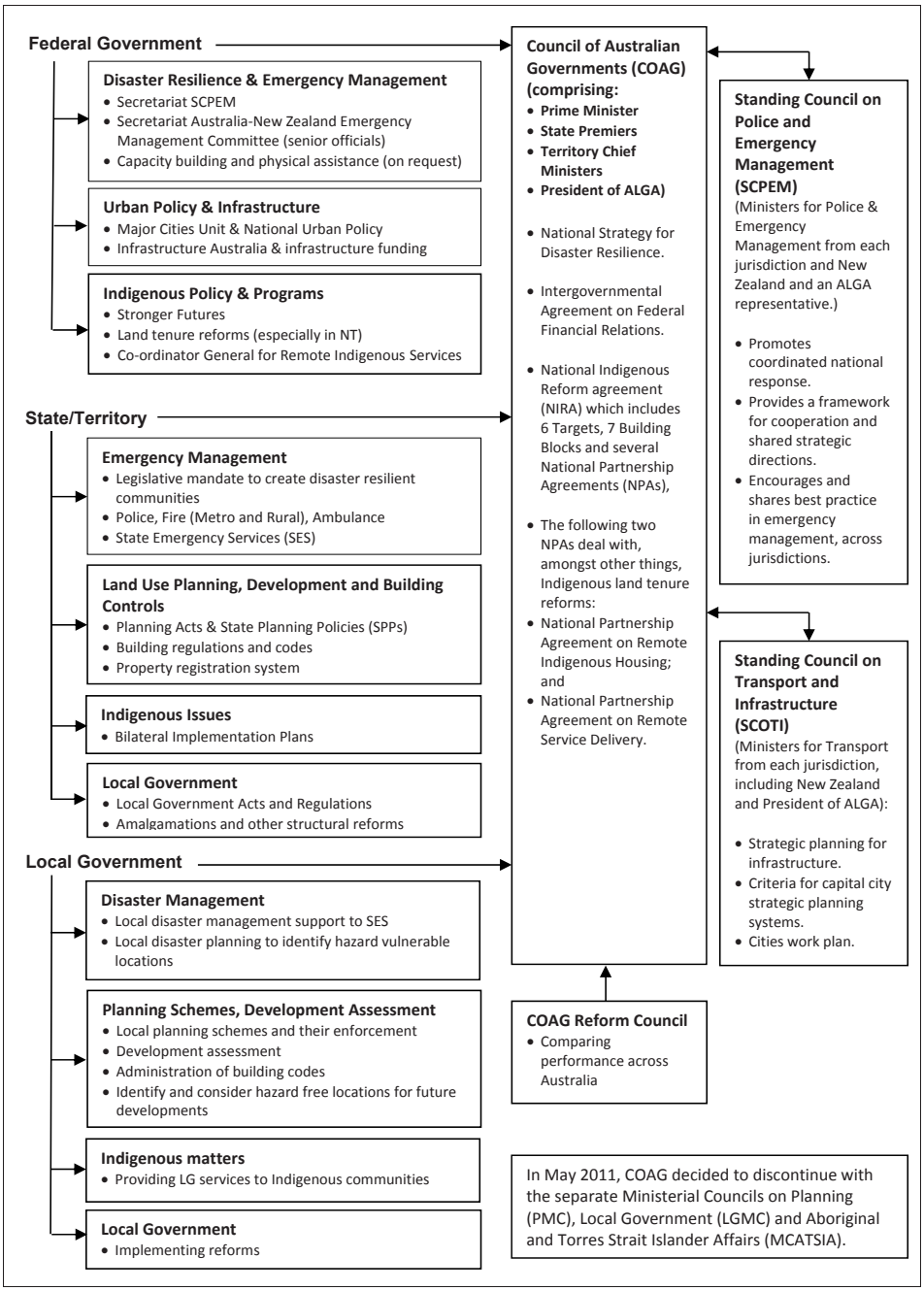
The increasing likelihood of climate change related sea level rise and concerns about its impact on remote communities led us to examine current governance arrangements for emergency management, land use planning and Indigenous public policy to see whether the system is geared toward assisting communities to improve their disaster resilience.

EMERGENCY MANAGEMENT, DISASTER RESILIENCE, LAND USE PLANNING AND INDIGENOUS PUBLIC POLICY IN AUSTRALIA'S FEDERAL SYSTEM

Under the Australian Constitution, the federal system of government in Australia is a tripartite hierarchy of political power consisting of Federal (national), state and territory, and local governments. Section 51 of the Constitution contains the powers conferred on the Federal Parliament by the States. Local government is a creation of the States and the Northern Territory and derives most of its powers from State/Territory legislation (Williams and Maginn 2012). Figure 2 shows the relationships between the three levels of government and the responsibilities for emergency management, disaster resilience, land use planning and development control, Indigenous policies and programs (as at June 2013). The details of these intergovernmental arrangements are explained in more detail in Bird et al. (2013).

Significantly, the responsibility for the protection of life, property and the environment primarily rests with the States and Territories. This includes the provision of police, fire, ambulance services and emergency service organisations comprised of staff and volunteers who provide a disaster response capability within each jurisdiction. Managing emergencies is also the primary responsibility of state and territory governments with local governments playing a significant support role. State and territory governments have arrangements with each other to share resources when necessary and, in particularly major disasters or adverse events, a state or territory government may seek federal assistance (COAG, 2011)

Figure 2: Relationship between three levels of government and responsibilities for disaster resilience and emergency management, land use planning, Indigenous policy and programs.



To overcome some of the structural impediments to national policy development, in 1992 the Commonwealth, the States and Territories agreed to the establishment of the Council of Australian Governments (COAG). COAG's role is to facilitate policy reforms that are of national significance and that require coordination between all levels of government. COAG is responsible for providing national leadership on emergency management (all hazards) and disaster resilience, and it does this through the Standing Council on Police and Emergency Management (SCPEM). The SCPEM comprises of ministers from Australian federal, state and territory governments, a representative from the Australian Local Government Association and a relevant Minister from New Zealand.[5]

In 2011, COAG adopted the *National Strategy for Disaster Resilience* (NSDR) that was developed under the guidance of the SCPEM (COAG, 2011). The NSDR provides high-level guidance on disaster management to all levels of government, business and community leaders and the not-for-profit sector, and includes a number of suggested priority outcomes in relation to reducing risks in the built environment, including:

1. "All levels of decision making in land use planning and building control systems take into account information on risks to the social, built, economic and natural environments;
2. Information on the likelihood of damage from hazards is actively shared, and tools are available to support understanding of potential consequences and costs;
3. Building standards and their implementation are regularly reviewed to ensure they are appropriate for the risk environment;
4. Development decisions take account of both private and public risks;
5. Natural hazard management principles are included in tertiary and vocational training and education curricula for relevant professional and building industry sectors;
6. Settlements, businesses and infrastructure are, as far as is practicable, not exposed to unreasonable risks from hazards or have implemented suitable arrangements, which may include hardening infrastructure or taking up adequate insurance, to protect life and property from known hazards;
7. Following a disaster, the appropriateness of rebuilding in the same location, or rebuilding to a more resilient standard to reduce future risks, is adequately considered by authorities and individuals" (COAG, 2011, 12).

The NSDR recognises factors that influence disaster resilience which include remoteness, population density and mobility, socio economic status, age and percentage of the population for whom English is a second language. Remarkable however, it does not recognise the need for tailored advice and support for Indigenous communities that are exposed to risks from climate change impacts. This is a significant omission.

For many years there were separate Ministerial Councils for Planning, Local Government and for Aboriginal and Torres Strait Islander Affairs that provided for coordination on urban and regional affairs and land use planning, local government matters, and matters affecting Indigenous people. However, in May 2011 pursuant to a national review of COAG councils and committees, COAG decided to discontinue these Councils.

Nevertheless, in 2009 COAG agreed to a review of capital city planning and adopted a set of nine national criteria for capital city strategic planning systems (COAG, 2009), and in 2012 agreed that COAG's Standing Council on Transport and Infrastructure (SCOTI) would undertake further work on cities (COAG, 2012). Further, in May 2011, the Federal Government released its National Urban Policy (Australian Government 2011). None of these initiatives, however, address planning and development matters in remote Indigenous and non-Indigenous settlements.

Issues affecting Indigenous people and communities are considered directly by COAG and are presently being dealt with through the National Indigenous Reform Agreement (NIRA) that was initially endorsed by COAG in 2008 and updated in 2011. The NIRA is a partnership between all levels of government to work with Indigenous communities in order to 'close the gap' in Indigenous disadvantage in target areas, including health, education, housing, economic development, personal safety and governance and leadership. The States and Territories are tied into this agenda through a series of National Partnership Agreements and Bilateral Implementation Plans, which include several objectives relating to Indigenous land tenure reform to facilitate home ownership and economic development on Aboriginal held land. The federal government initiated these reforms because it regards existing group or communal land tenure arrangements as failing to provide secure tenure over public investments in housing and infrastructure and as an obstacle to the expansion of government-backed home ownership programs and economic development (Wensing, 2013). While personal safety is included in COAG's list of target areas, disaster resilience in remote Indigenous communities is neither mentioned nor considered. Likewise, the likely impact on land tenure and/or native title rights and interests is also neither mentioned nor considered.

Understanding these complex intergovernmental arrangements for all emergency management, risk reduction and matters affecting Indigenous people are crucial to responding to the impacts of climate change, including those arising from sea level rise and high tidal surges, and building community resilience. These complexities indicate that securing comprehensive and consistent national level policy and legislative responses to disaster resilience, emergency management and land use planning relies upon a high level of sustained cooperation between the various jurisdictions. These arrangements can sometimes be fraught with tension, inter-governmental rivalry and disagreement. Other times, they are simply overlooked by non-Indigenous policy makers and politicians.

The following section examines land use planning's role in facilitating climate change adaptation in northern Australia.

LAND USE PLANNING AND CLIMATE CHANGE ADAPTATION IN NORTHERN AUSTRALIA

The Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (IPCC 2007) suggests a mix of adaptation and mitigation measures in responding to the challenges of climate change. Adaptation is needed for the unavoidable impacts that will occur due to the emissions that have already occurred, and mitigation measures must be put in place to actively reduce the amount and severity of impacts in the future.

Land use planning in remote communities is essential to ensure that future climate change impacts can be absorbed with less impact. When combined with building standards, these considerations can assist in reducing a community's vulnerability to natural hazards, such as bushfires, cyclones and flooding, and can mitigate the likelihood of loss of life as well as damage to and/or the destruction of property and infrastructure (COAG, 2011).

Lack of planning in remote Indigenous communities has resulted in ad hoc development and the provision of infrastructure that has not kept pace with growing communities. This was particularly evident in Western Australia and Queensland, because until recently, Indigenous communities were not covered by conventional statutory planning schemes.

Several barriers exist which serve to impede inclusive planning practices. Community layout and design is often restricted by different tenure arrangements and the size of the community lease, as explained by a Wujal Wujal respondent: "We're very restricted, as you can see, with the land…when they were… thinking of developing or establishing the community… I don't know what they were thinking, locking everybody in the site where the community is, because… the population's not growing… at a fast rate, but it is growing".

Good planning is being impeded by the lack of mapping information about communities, and people are frustrated that homes are still being constructed in low-lying areas: "That's a pretty stupid place to be putting those things". An official responsible for the Eastern Kuku Yalanji people's traditional estate discussed the need to "get some really nice mapping up on the screen in front of everybody so they can see exactly what's actually there that's available for development". This is seen as beneficial for helping the community to make decisions about: "how to allocate that land, thinking about future generations as well". This is particularly important in areas where much of the land consists of: "creeks and swamps and really steep slopes", which are not appropriate for development.

Indigenous people are also often excluded from contemporary land use planning processes and their needs are often not adequately taken into consideration. Respondents from all case study locations would like to be more involved in the planning and development of their homelands, housing and enterprises. One resident questioned: "how do we fit into the planning scheme?" He believes that "people in planning think that Aboriginal people are not capable of doing things". Another stated her frustration with drawn-out, complex bureaucratic processes: "The planning is dividing us. I don't want to work in separation... We have to look at a holistic approach. We need to plan a future for the livelihood of those people… We've gotta [got to] be very careful of our planning".

Positive models exist that are built around inclusion of traditional owners in planning processes. The Dampier Peninsula Planning Project that was undertaken by the Western Australian Department of Planning in 2011-12 operated through a process of traditional owners identifying their concerns and making recommendations on how they should be managed. The objective was to move away from being "passive recipients", towards a system of Indigenous regional governance where traditional owners can prioritize the projects and investments that they feel are important. However, despite "people feeling really empowered and impassioned by the process…[and] really aspiring to a whole new way of doing business" respondents felt that the Western Australian Government was "totally overwhelmed" by this approach.

Approaches like these would allow better cooperation and knowledge sharing between Indigenous and non-Indigenous stakeholders. One respondent in Broome stated: "Our environment could be protected if we had some understanding with the Shire". He gives the example of a clash that occurred over the proposed construction of a three-storey building. Indigenous elders protested that the proposed site was a significant area for dragonflies, and that for health as well as cultural reasons, it was important that Shire planners preserve the area: "…the old people explained that here in Broome, it rains, and after the rain, there's puddles laying around. What breeds in there? Mr Mosquito. What eats the mosquito? It's the dragonfly". Respondents stressed the important role officials have in making the right decision to protect the environment. However, it is recognised that these decisions are often clouded by economics and growth: "They're not there for the benefit for the community and environment". To overcome such issues, many respondents believe that there needs to be greater local representation in decision-making: "We are the ones who are going to be living in the communities. We know from history, we know where we want to go".

The location of existing settlements or their planned expansion to accommodate population growth through new development can either create or exacerbate exposure to natural hazards. Land use planning can be used to reduce loss of life, damage to property and essential infrastructure, even where the risks may not be fully understood. The predicted impacts of climate change, especially sea level rise

and flooding from high tidal surges, needs to be factored into land use planning and development assessment processes. Good planning can reduce the physical vulnerability of settlements by identifying suitable low-hazard locations for development.

COMPARATIVE ANALYSIS OF LAND USE PLANNING AND EMERGENCY MANAGEMENT SYSTEMS IN NORTHERN AUSTRALIA

For this study, we undertook a comparative analysis (after Geva-May 2002) of the land use planning and emergency management systems in the three jurisdictions covering the tropical north of Australia where our case study communities are located (WA, NT and Qld). While each jurisdiction has the power to create its own separate procedures specific to their history and circumstances, we assessed five common elements within each of these systems for measures that require or encourage natural hazard resilience. These were:

1. **Planning legislation** – Does the objects or purposes of the legislation require the planning process to create natural hazard resilient communities? Does strategic planning for the expansions of current communities or the location of future communities consider the vulnerability of communities to natural hazards and require the inclusion of abatement or mitigation measures in subordinate instruments?
2. **State Planning Policies** (instruments that protect matters of importance or significance to the state or territory) – Are there state planning policies specific to hazard mitigation in place within the jurisdiction and if so, are they reflected in other state or territory planning instruments and are local government planning schemes required to take them into consideration?
3. **Planning Schemes and Development Assessment** – To what extent are statutory planning schemes required to consider natural hazards risks and either prohibit or limit development in identified hazard locations? Do development assessment processes assess the natural hazard risks at the individual site or project level?
4. **Property disclosure** – Does the property register system (land title) include a requirement to disclose information about the location of the land in relation to hazards (including flood maps and storm surge maps)?
5. **Emergency Management Systems** – What data does the emergency management system collect and collate to identify and mitigate the risk of natural disasters (in this case cyclones, floods, and storm surge), and to what extent is this data accessible and applied by relevant state/territory and local government agencies responsible for land use planning and development assessment?

The first four components comprise the planning frameworks, which are broadly similar in each jurisdiction. The fifth element was particularly important because we wanted to ascertain the extent to which data collected by emergency manage-

ment agencies was being used in land use planning processes to develop disaster resilient communities, especially in the context of remote Indigenous communities in Australia.

We found that none of the land use planning systems in the three case study jurisdictions use their planning legislation effectively to create disaster resilient communities. The objects and purposes of the planning Acts do not include a specific requirement to take the effects of climate change into account. However, in the provisions explaining what advancing the purpose of the *Sustainability Planning Act 2009,* (Qld) (SPA) in Queensland means, the SPA includes a provision stating that 'avoiding, if practicable, or otherwise lessening, adverse environmental effects of development, including, for example—climate change' (s.5 SPA *Sustainable Planning Act 2009* (Qld)).

Queensland (Queensland Government, 2003) and Western Australia (Western Australian Government 2006) have state planning policies dealing with natural hazards and disaster risks. Both of these state planning policies require the preparation of regional and local planning strategies, structure plans, local planning schemes, and other planning decisions to have regard to these State Planning Policies. The Queensland state planning policy states that Queensland will be vulnerable to the impacts of climate change and that predicted changes include 'sea level and coastal erosion' and 'flood risk', but not 'sea level rise' (Queensland Government 2003, 5). The Western Australian state planning policy on natural hazards and disasters makes no mention of the likely impacts of climate change (Western Australia Government, 2006). The NT planning system does not have a state planning policy dealing with natural hazards and disaster risks.

What we found is that the focus of land use planning legislation and policy in these jurisdictions is premised on creating opportunities for and regulating development and on administering development assessment processes efficiently and effectively. With some exceptions for Queensland, land use planning and emergency management processes are not adequately geared toward addressing the priorities identified in the NSDR and especially not in terms of improving the disaster resilience for likely climate change impacts in remote Indigenous communities. This is a serious deficiency in our land use planning and development assessment systems given what we know about the likely long term effects of climate change impacts.

There is therefore a serious disconnect between emergency management, hazard knowledge, land use planning and disaster resilience. This disconnect is present throughout each of state and territory emergency management and land use planning regimes. Emergency management views land use planning as essential to disaster prevention pursuant to the NSDR (COAG, 2011) and the NT 'All Hazards Emergency Management Arrangements' (Northern Territories Government, 2011, 23). However, as far as we could ascertain, local land use planning does not view the data produced by emergency managers as being relevant to the development of local planning schemes, with the exception of the relatively recent planning scheme

for Wujal Wujal in Queensland (Wujal Wujal Aboriginal Shire Council 2010, 4, 19). It appears that taking account of the "risks to the social, built, economic and natural environments in land use planning and building control systems" (COAG, 2011, 11) and ensuring that 'settlements, businesses and infrastructure are, as far as is practicable, not exposed to unreasonable risks from hazards' (COAG, 2011, 11) as per the NSDR, does not necessarily occur in WA and the NT.

We also examined the land title registration and disclosure systems in the three jurisdictions. We found that only WA requires disclosure of hazard data about properties as mandatory. While these systems appear to be very effective for the major cities and urban settlements, it is not the same for remote Indigenous communities. This is because in almost all cases the underlying land tenure in remote and/or discrete Aboriginal communities is either communally owned and held by an Aboriginal organisation or is held in trust by the state for the use and benefit of Aboriginal inhabitants and both these forms of tenure are also subject to native title rights and interests.

CONCLUSION

We agree with the NSDR that land use planning is an important mechanism for improving disaster resilience (COAG, 2011, 11-12), including in remote Indigenous communities which are likely to experience increased frequency and/or intensity of extreme weather events, both slow (sea level rise, drought) and rapid onset (storm surges, cyclones, floods) as a consequence of climate change. However, it is apparent that land use planning mechanisms will only work effectively when there is an explicit requirement for them to take these factors into account for a particular area, either when local land use plans are first being prepared or when they are due for periodic review.

It is evident that there is a clear disjuncture between 1) understanding the likely impacts of climate change arising from sea level rise, tidal storm surges and flooding and the collection of emergency management data, and 2) the consideration of hazards and risks in land use planning systems. With the exception of Queensland, land use planning and emergency management processes are not adequately geared toward addressing the priorities identified in the NSDR and especially not in terms of improving disaster resilience for likely climate change impacts. This disjuncture is particularly evident in the context of remote Indigenous communities in Australia. Moreover, the research highlights the concerns that Aboriginal people have about climate change impacts and the importance for including them in the decision making process.

We also found that only Western Australia makes disclosure of hazard data about properties mandatory, but this system does not work in discrete Aboriginal communities in WA as a way of passing on knowledge about potential disaster risks because

the land is held in trust by the State for the use and benefit of Aboriginal people and not held by local organisations or individual landholders.

We conclude that several legislative, policy and administrative reforms are urgently required if remote and discrete Indigenous communities are to be afforded the same levels of protection from the impacts of sea level rise and high tidal surges as are afforded to other communities around Australia.

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NOTES

1. The information in this article was current at the time it was written in June 2013. A federal election took place in September 2013 which resulted in a change of government, and many of the federal structures mentioned in this article have since undergone significant changes. The authors have chosen not to update the content of this article as we wanted this work to reflect the circumstances at the time our research was undertaken.
2. The term 'Indigenous' is used in this paper to include Aboriginal and Torres Strait Islander people as the First People of Australia, noting that Aboriginal and Torres Strait Islander people retain distinct cultural identities, and that for the most part, the case studies in this report focussed primarily on Aboriginal people on the mainland of Australia.
3. This survey also found that from NBY's perspective, the real population number for planning purposes is what is termed in the survey report as 'the Indigenous service population'. This is the sum of Indigenous households in Broome plus Indigenous people staying in non-private dwellings in Broome or sleeping out in Broome at any one time. This number is larger, at 3,952 persons (or 30.9 per cent of the 2011 Census population of urban Broome) (NBY 2011:13).
4. To Aboriginal and Torresstrail Islander people, 'land and sea country' means land, water, sky and air, and is a nourishing terrain, giving and receiving life.

It is not just imagined or represented; it is lived in and live with (Rose, 1996).

5. Ministerial Councils under COAG may have statutory decision-making functions under the Trans-Tasman Mutual Recognition Arrangement (TTMRA), and when considering TTMRA issues, New Zealand has full membership and voting rights of relevant Councils (COAG 1998).

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