

MOVING BOUNDARIES:

Managing Development in Regional Coastal Councils in South Australia;

A discussion of the role of Local Government in Climate Change Adaptation.

MAJOR FINDINGS AND OUTCOMES:

In 2009 Climate Change Risks to Australia's Coasts: A First Pass National Assessment found that between 25,200 and 43,000 residential dwellings were at risk from inundation in South Australia from a sea level rise of 1.1 meters, and that 7,000 dwellings were found to be within 110 metres, and 1,600 within 55 metres of coastal typologies highly susceptible to erosion (DCC 2009: 106). A significant number of the aforementioned at risk dwellings are located in regional areas serviced by small Local Government Organisations with limited capacities.

In this scoping study a total of twenty development professionals and Councillors on Development Assessment Panels [DAPs] from ten regional Local Government Organisations with coastal frontage were interviewed. The structured interviews were conducted from July to October 2010 and addressed climate change adaptation, amenity migration and new residential developments through a range of themes including capacity, attitudes and perceptions, processes, actions and intentions, and motivators and barriers. A small selection of stakeholders were also interviewed.

The study reveals that:

19% of participants believe that development is still being approved "too close to the coast";

Inadequate and irrelevant information on climate change and sea level rise is a major barrier to Local Government taking action on climate change adaptation;

Climate change is generally accepted as an issue for planning but has varied acceptance in other areas of some Councils, in particular with elected members;

Participants were more worried about climate change than sea level rise;

The majority of Councils in the study only responded to adaptation initiatives imposed or organized by other stakeholders; and

The majority of Councils in the study had not engaged their communities on climate change issues.

From the research the author concludes that unless the perceptions and attitudes of "key actors", in particular elected members, alter to reflect an increased understanding of climate change, the high probability of the IPCC projections, localised impacts, and the benefits of pro-active adaptation planning, climate change adaptation by Local Government in regional coastal areas of South Australia will continue to be varied and largely in response to adaptation activities organised or enforced by other stakeholders.

Given that in the subject areas the majority of participants saw Local Government as an extension of and an advocate for the community, community perceptions and attitudes will also strongly effect the direction taken by councils in responding to climate change projections.

The most pressing aspect of climate change adaptation in the subject areas is the successful prevention of additional development and additional infrastructure provision in areas that are found through spatial analysis of sea level rise and compound impacts, likely to be affected by inundation or erosion, or prevent the landward migration of coastal ecosystems, in the 2100 time period.

It is this author's belief that this cannot be achieved with the accuracy needed to convince "key actors" and the communities of the necessity of and the equity in decisions made regarding development restrictions in the coastal zone, unless thorough spatial mapping of high risk areas using high resolution DEM, including a localized assessment of compound impacts, is undertaken by a credible common source in strong collaboration with Local Government organisations. The AHD levels currently in Development Plans do not provide an accurate spatial understanding of areas at risk due to compound impacts, and additional areas required to be reserved to accommodate the landward migration of coastal ecosystems.

The author suggests that in the interim it may be prudent to apply a precautionary principle to development on the coast; and for the State Government to indicate spatially an area where individual coastal hazard vulnerability assessments are required at the applicant's expense for new development to be considered (as used by VCAT [1206 2009]).

Additionally, Councils could choose to increase descriptions of non-complying development in their Development Plans. As non-compliant development applications do not have appeal rights (Planning SA 2002: 52), listing additional undesirable development as non-compliant in the strategic planning instrument will make it easier for Development Assessment Panels to refuse development without the fear of litigation in the current time frame. Such an action may increase the level of outcomes that are in accord with policy intentions regarding development in proximity to the coast, and reduce individual applications being exempt.

FURTHER RESEARCH SUGGESTIONS:

Further research might build on the scoping study to explore how best practice climate change adaptation theory can be applied in reality to governance and spatial planning in non-metropolitan coastal councils in South Australia and Victoria. A comparison of the two states will facilitate discussion on how the high resolution Digital Elevation Modelling that is available for the Victorian coastline but not that of South Australia, effects climate change adaptation. Further research might also analyse the benefits and consequences of: utilising trigger mechanisms to initiate proactive measures in response to a defined level of environmental change as a method for prioritizing tasks when resources are limited (as used by DC of Grant [Echelon Australia 2010]); and/or applying the "environmental sustainability criteria" used by the South Australian State Government to assess shacks for suitability for free holding in 1991 (PPK 1991; in Caton & Harvey 2003: 169-170).

References

- Department of Climate Change [DCC] (2009), 'Climate Change Risks to Australia's Coast: A First Pass National Assessment', DCC, Canberra.
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- Harvey, N & Caton, B (2003), 'Coastal Management in Australia', Oxford University Press, Victoria.
- Planning SA (2002) 'Guide to Development Assessment: An Integrated Planning and Development Assessment System for South Australia', Planning SA, SA.
- Proceedings of the Victorian Civil and Administrative Tribunal, 16 July 2009, 'Ronchi & Anor v Wellington SC (includes Summary) (Red Dot) [2009] VCAT 1206'

Grant Holder: Anne Weckert, School of Architecture, Landscape Architecture and Urban Design, University of Adelaide, SA
Honours Thesis Supervisor: Dr David Jones

