

GEEM

A Strategic Research Centre of the University

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Committee Secretary

Standing Committee on Climate Change, Water, Environment and the Arts

PO Box 6021

House of Representatives

Parliament House

**CANBERRA ACT 2600** 

**AUSTRALIA** 

4 June 2008

RE: Inquiry into climate change and environmental impacts on coastal communities

To the Committee,

The Griffith Centre for Coastal Management (GCCM) is a research centre based within the Science, Environment, Engineering and Technology Group at Griffith University. Our goal, in partnership with Gold Coast City Council, is to become a Centre of Excellence by developing and promoting at a national and international level, targeted research that contributes to all aspects of sustainable management of coastal regions.

GCCM undertakes a broad range of coastal planning and management activities in the south-east Queensland region, nationally and internationally and are also represented on a number of local, state and national committees. GCCM leads the Protecting Our Coastlines theme of the Griffith University Climate Response Program which brings together a diverse range of expertise in climate adaptation.

We are pleased to provide the House with this submission into climate change and environmental impacts on coastal communities.

Along with this submission we have also attached a copies of the following publications:

Lazarow, N., Souter, R., Fearon, R., & Dovers, S. (Eds.). (2006). Coastal Management

in Australia: Key Institutional and Governance Issues for Coastal Natural

Resource Management and Planning. Brisbane: Cooperative Research Centre for

Coastal Zone, Estuary and Waterway Management.

Lazarow, N., Smith, T. F., & Clarke, B. (2008 in press). Coasts. In D. Lindenmayer, S.

Dovers, M. Hariss Olson & S. Morton (Eds.), '10 Big Things' (working title).

Canberra: CSIRO (in press).

The 2006 publication by Lazarow, Souter, Fearon and Dovers examines in detail the key

governance and institutional challenges for coastal planning and management in

Australia. Further, we also recommend to the Commonwealth a book chapter (currently

in press) by Lazarow, Smith and Clarke that identifies 10 priority tasks, including

immediate actions and key performance indicators for improved coastal management in

Australia.

We look forward to an ongoing role in coastal planning and management in Australia.

Should you have any questions or require further information about this submission,

please contact the Centre on the details provided.

Yours faithfully

**Professor Rodger Tomlinson** 

Neil Lazarow

Director

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Griffith Centre for Coastal Management Griffith Centre for Coastal Management

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## Existing policies and programs related to coastal zone management, taking in the catchment-coast-ocean continuum

- 1. The current policy framework for coastal planning and management in Australia is both complex and multi-jurisdictional. Despite or because of the fact that most of our population lives on the coast and a significant component of our agro-industrial base is also located on or close to the coast, access to the coast and its resources is both highly desirable and highly competitive.
- 2. The release of the 2003 National Framework was an attempt by the Commonwealth to provide assistance for coastal issues that could be addressed at a 'national scale'. This under-funded and under-resourced Framework and its companion Implementation Plan was similar to the 1995 National Coastal Policy in many regards. Some key shortfalls within the National Framework and Implementation Plan (The Plan) are:
  - a. The Plan does not adequately reflect the Commonwealth's long history of investigation into and knowledge of ICM issues (most of which were progressed when Labor was in office).
  - b. In principle the 'priority areas' for the coast are sound. There are, however, a number of mechanisms and strategies, which could be used to build on and improve these areas. For example:
    - The predominant reliance on the NRM network does not capture the value and importance of local knowledge that previous reports have suggested is critical to building up our understanding of the coastal zone.
    - ii. Across Australia, States have made good progress in the development of coastal management plans over the past 15 years. While there are a number of very good links with local governments, which carries out the majority of day-to-day management activities on the coast, there are many barriers to the transfer of knowledge to the local level. Positive outcomes could be better achieved through the development of strategic research and funding arrangements with local government that linked both the NHT / NAP process and a distinct Commonwealth coastal management program to onground outcomes and improved stewardship of coastal resources. This is not current reflected in the Commonwealth's approach.

- iii. The Plan does not adequately acknowledge the breadth of existing research nor the existing linkages that have been built up between institutions over time and the benefits this can have for strategic planning at the local and regional levels.
- iv. The Plan did not provide a platform for the investigation, understanding and policy settings in the coast-ocean continuum. Unfortunately, this omission was also carried over into the ALP's pre-election platform and it is hoped that this will be redressed as part of this review. The coastal mid-ocean shelf (approx. -10m to -100m) represents an understudied region that we believe has significant impacts on the nearshore coastal environment, in particular for longer-term sediment supply / transport.
- 3. There is currently no collective long-term vision for our coast. A key goal for the Commonwealth must be to lead the nation in the development of a long-range vision for the coast, collectively developed by the coastal community (politicians, planners, scientists, managers, residents and resource users).
  - a. The development of a National Coastal Act could be a key mechanism by which the Commonwealth could set up mechanisms to assist the States and regions with the development of strategic coastal planning. A national act would also synthesise the Commonwealth's national and international commitments to coastal and marine protection and management with a view to establishing a National Coastal Policy and complementary management program. With respect to the current government's policy statements on coastal management prior to the 2007 Federal Election, the commitment to the development of a national coastal policy is certainly welcomed.
  - b. The suggestion of a National Coastal Council or similar advisory group, originally discussed in 2006 by the ALP but left out of the 2007 policy statement, is an issue that has been hotly debated for some years. It is our advice that the Commonwealth consider establishing such a group to assist with the development of the coastal policy with a view to establishing a permanent Advisory Council.

- The environmental impacts of coastal population growth and mechanisms to promote sustainable use of coastal resources.
- The impact of climate change on coastal areas and strategies to deal with climate change adaptation, particularly in response to projected sea level rise.
- 4. Our understanding of emerging impacts on the coast is a significant challenge for coastal management. Climate change and natural variability impact ecological systems; the places we live; how we currently use the coast and how we will use the coast in the future. At the state and local level in particular, planning and design regulations are required. In particular, assistance in the determination of the social, economic and environmental impacts of changes to the coast will be of assistance.
- 5. Development pressure on the coast is significant and is likely to increase in the coming years as our 'babyboomers' retire, downsize and shift to the coast. This process has been well-documented. Strategic planning at the local and regional level, consistent with a collective vision for the coast is part of the solution towards controlling the environmental impacts of population growth and helping steer coastal communities towards sustainability. In a number of cases (e.g. NSW and Qld) state coastal policies are treated as guidelines rather than prohibitive planning documents.
  - a. The adoption of stronger planning tools and a review of some of the perverse financial assistance schemes may go some way to altering the supply-demand and footprint along the coast. As a national knowledge broker, there is a central role for the Federal government in such a process.
  - b. The predicted increased frequency and severity of storms, localised flooding and pollution events will impact severely on many coastal localities. The risk of beach loss, especially in built areas such as the Gold Coast and Sydney's northern beaches, represents significant threats to coastal infrastructure, public amenity and environmental values. Adaptation now or mitigation at some point in the future will be expensive and consideration should be given as to what types of assistance (financial, expertise, legal, setting of national standards etc) the Commonwealth will be able to provide to the States to assist with the 'futureproofing' of communities in many of the at risk regions.
- 6. Our understanding of the both the importance and economic value of coastal ecosystems as well as the non-market value of the coast is currently quite limited. A federally led initiative to improve our understanding of the total economic value of

- the coastal systems is a significant imperative for improving the way in which we value and subsequently manage the coast.
- 7. Affordable energy and water supply will be a key issue for the continuance and growth of communities around Australia. While our current investment in ocean-based renewable energy and desalination technologies is limited, it is forecasted to grow significantly in the years to come. A comprehensive and strategic approach to how we manage the development of this type of infrastructure within the coastal zone is urgently required.

## Mechanisms to promote sustainable coastal communities.

- 8. Understanding the importance of cultural heritage, identity, and (often intangible) concepts such as play, ceremony and beauty in a rapidly changing society are key challenges for coastal management in Australia. Strong cultural attachment to particular coastal areas is significant for many Indigenous Australian communities and is recognised (although not necessarily protected) in a number of policy frameworks. Australians' special relationship to the coast is widely recognised (but poorly understood) and commonly identified in coastal planning documents (e.g. most State coastal policies) yet it is generally given a low priority in programs that are driven by environmental protection agencies. Understanding how we relate to and value particular places and spaces can significantly improve our understanding of human behaviour and lead to better management of human impacts on the coast. The Commonwealth could play a key role in helping to capture this knowledge and promoting the stewardship of the coast not just through on-ground works but through investment in a range of social and cultural programs.
- 9. A key platform for the promotion of sustainable coastal communities is the development of mechanisms for capacity building, social learning and adaptive management. Fundamental to being able to respond to a changing environment is building the capacity to manage change. This applies to both the broader community and to government. The consideration of partnerships is an important evolutionary component in the development of sustainable coastal communities. In partnership with the general as well as the scientific community, the Federal government could play a key role in the development of national standards for monitoring and evaluation in this area.

- Governance and institutional arrangements for the coastal zone.
- 10. We refer the House to the attached compendium titled: Lazarow, N., Souter, R., Fearon, R., & Dovers, S. (Eds.). (2006). Coastal Management in Australia: Key Institutional and Governance Issues for Coastal Natural Resource Management and Planning. Brisbane: Cooperative Research Centre for Coastal Zone, Estuary and Waterway Management. This publication is a collection of essays by many of Australia's leading coastal management practitioners that focus on the challenges and opportunities for reforming institutional arrangements for the management of the coastal zone. A number of primary recommendations are common across the collection of essays in this document. These are summarised as:
  - a. The need to realise the potential of strategic planning;
  - b. The need for consistency across boundaries; and
  - c. Better integration through regional initiatives.
- 11. Despite the importance of the coast and extensive reviews into coastal management in Australia since the early 1980s, coastal management has not been maintained as a central part of government policy and the funding for and support of coastal management programs has been intermittent at best. There is no question that the development and implementation of policies and programs is a highly politicised process. However, policy interventions that require changes in human behaviour and environmental responses often take some time to take effect. While an adaptive approach to policy development is required, the political commitment to run the full course, including the funding of programs and staff is important. There is no doubt that the sporadic nature of funding programs has also resulted in staff recruitment and retention difficulties within coastal management organisations (particularly at the regional level) and the subsequent loss of corporate knowledge.

We would like to acknowledge the work of Dr Tim Smith, Dr Beverley Clarke, Dr Rob Fearon, Dr Regina Souter, Professor Stephen Dovers and the authors who contributed to the development of the two publications cited in this submission. Full copies of both documents are attached with this submission.