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Secretary: 

From: Greg Stuart
Sent: Tuesday, 9 September 2008 17:25
To: Sullivan, Kate (REPS)
Cc: Bruce P Hooper
Subject: Submission to Parliamentary Inquiry into Climate Change and Coastal Impacts

Hello Kate,

Introduction

I have held a number of roles within public and private sector coastal management in Queensland. Currently I work for DHI Australia. The DHI Group is a not-for-profit, global, independent research and development organisation dedicated to work within the fields of water, environment and health. Within these fields we provide a wide range of consulting, research and policy services as well as leading edge technologies and products. www.dhigroup.com

DHI currently works with the United Nations Environment Program's FreshCo program aimed at building capacity in the Integrated Coastal Area and River Basin Management. www.ucc-water.org/freshco

Prior to this role I have worked at Gold Coast City Council, Hervey Bay City Council and the Qld Environmental Protection Agency. I was the coordinator and founder of the Queensland Coastal Councils Group a member of the steering committee for the 2007 and 2009 Qld Coastal Conferences. I am an adjunct lecturer with the Griffith Centre for Coastal Management and a member of the environmental college of the Engineers Australia. I have qualifications in environmental engineering, marine science and business. I have also been a judge in the Clean Beach Challenge. I believe this gives me relevant experience to make a submission to your inquiry.

Below I will highlight the key points of my submission and attach further documents that back up these key points.

Local Government

1. *Local governments are currently being overlooked in the coastal management debate*
2. *Local governments require technical and financial support from state and federal governments*
3. *Current funding schemes need to be expanded in scope and amounts*

Local government is the level of government that can often have the most impact (negative or positive) on the activities that occur on the coast such as development, foreshore reserve management, beach protection works etc. Many councils are struggling to attract and retain staff that have enough knowledge and experience to manage their coasts. Without technical support at the state level for these council officers many poor decisions can be made.

Many councils also struggle to afford the cost of beach management tasks. Beaches in high use areas do not look after themselves. For instance, Gold Coast City Council had approximately 7M beach visits in 2006. The cost of managing the beaches during that year was in excess of \$10M. While the Gold Coast may be considered an extreme case due to the high level of beach usage (The Gold Coast tourism region receives more visitors than the entire Great Barrier Reef) many councils have the same issues on a varying scale. In essence many Councils cannot

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afford the level of beach management required at present just from tourists. Climate change impacts will only make this worse.

Attachments

The paper by Stuart et al in the attached monograph in institutional arrangements gives more details on the opportunities and barriers for local governments in coastal management. See also ICZM on the Gold Coast, Qld Coastal Forum, Withycombe & Morrison, and Hunt papers.

Partnerships and Knowledge Building

1. *Coastal communities can only manage climate change impacts through partnerships.*
2. *Basic research into some coastal systems is required.*
3. *Long term commitments to capacity building are essential*

Many existing groups such as NRM boards/Catchment Management Authorities, QCCG, SCCG Sea Change Taskforce, MCCN have the potential to provide the networks needed to manage the coast sustainably. Capacity building within these networks is a major need that would reap large dividends. It should be noted that this requires a long term investment from the national and state governments. The tools already exist (e.g. UNEP-DHI FreshCO program, Coastal CRC citizen Science Toolbox etc) but the consistent application of these tools seems to be where significant improvements can be made.

There is still a need for basic research into many coastal issues. For instance, very little is known about the ecology of sandy beaches and yet they make up the highest proportion of coastline types in Australia. This is but one of many questions that need to be answered if we are to tackle climate change head on. Research Projects such as the Future Coastlines Project being undertaken by Griffith University in partnership with the Qld EPA, DHI and BoM can provide many of the answers but such research is expensive and has limited commercial application. Therefore it requires significant support from the government.

There are also many unproven "solutions" to coastal erosion that are presented to councils and other beach managers. There needs to be a recognised authority that can review such techniques and provide support to Councils.

Organisations such as DHI can develop, and deliver capacity building programs to support sustainable coastal management in Australia. We currently provide such a scheme in partnership with United Nations and there exists a significant opportunity with this review to undertake project in Australia.

Attachments

PEM trial at Hervey Bay
DHI Water Policy brochure

Coastal disasters

1. *Most coastal communities are not ready for increased coastal hazards due to climate change*

Climate change is likely to cause increased storm activity along the coast and higher water levels leading to more inundation and damage. The area affected by tropical cyclones and extreme wave attack may change. Since extreme storm activity near populated centres is infrequent, most communities are ill prepared to deal with these issues. Much of Australia is in a drought and would find it strange to be planning for storms, floods, cyclones etc. This is exactly the time to be preparing for them i.e. before they happen.

Aspects of climate change readiness include understanding the impacts to the following:

- People in the coastal zone

- Coastal Infrastructure
- Social infrastructure
- Business continuity
- Coastal ecosystems
- Coastally dependent markets
- Insurance costs
- Legal liability issues e.g. Can Councils be sued for allowing development in erosion prone areas? – recent decisions in NSW and Victoria

Attachments

Managing Coastal Disasters on Australia's Gold Coast

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