



NATIONAL SEA CHANGE TASKFORCE INC

REPORT

Australian Coastal Councils Conference

Held at Byron Bay, NSW on 2 and 3 March 2010

15 April 2010

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Summary

The Australian Coastal Councils Conference was convened by the National Sea Change Taskforce and the Byron Shire Council to provide a focus on the complex challenges facing the nation's coastal LGAs. These challenges include sea level rise, legal and insurance implications of climate change, ageing populations in coastal communities and housing affordability. It was held at the Byron Community Centre, Byron Bay, on 2 and 3 March 2010. A Welcome Reception for delegates was held on the evening of Monday 1 March. This was hosted by the Byron Shire Council at the Community Centre. One of the main topics discussed was the report of the coastal inquiry conducted by the House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts, *Managing our coastal zone in a changing climate: The time to act is now*. The conference also featured presentations on the Federal Government's report, *Climate Change Risks to Australia's Coasts*. Members of the Coast and Climate Change Council led discussion on this national coastal vulnerability assessment and its implications for coastal councils and their communities. Key speakers at the conference included:

- The Hon Justine Elliot MP, Minister for Ageing and Member for Richmond
- Ms Jennie George MP – Chair, House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts
- Stephen Alchin – Executive Director Planning, Infrastructure Australia
- Paul Anderson – General Manager, Eurobodalla Shire Council
- Cr Jan Barham – Mayor, Byron Shire Council
- Andrew Beatty – Partner and environmental lawyer, Baker & McKenzie
- Professor Ed Blakely – Principal, Blakely Global
- Cr Debbie Blumel – Chair, Sunshine Coast RDA Committee (QLD)
- Ms Pam Brook – Proprietor, Brookfarm, Byron Bay
- David Cant – CEO, Brisbane Housing Company
- Cr Patricia Chigwidden – Deputy Mayor, City of Victor Harbor (SA)
- Dr John Church – Oceanographer, Centre for Australian Weather and Climate Research
- John Coombe – Chief Executive, Alexandrina Council
- Ms Deb Cox – Writer and Producer, *Sea Change* and *East of Everything*
- Cr Paddi Creevey – Coasts and Climate Change Committee
- Ms Fiona Eagger – Co-producer, *East of Everything*
- Mayor Milton Evans – Chair, Southern Western Australian RDA Committee (WA)
- Andrew Hammond – Chief Executive Officer, City of Rockingham
- Dr Bruce Harper – Principal Professional Environment and Risk, GHD
- Andrew Howe - Senior Demographer, Australian Bureau of Statistics
- Dr Ian Joliffe – Principal Water Engineer, GHD
- Brydon King – Manager Planning AND Development, Surf Coast Shire
- Steve Kozlowski – Gippsland RDA Committee (VIC)
- Anne Leitch – CSIRO Sustainable Ecosystems
- Professor Barbara Norman – Coasts and Climate Change Committee
- Professor Bruce Thom – Coasts and Climate Change Committee
- Cr Ian Tiley – Chair, RDA Committee for Northern Rivers (NSW)

2010 Australian Coastal Councils Conference - Program Overview

TUESDAY 2 MARCH

- 9:00-9:10** **WELCOME – Barry Sammels, Chair, National Sea Change Taskforce**
- 9:10-10:00**
Paul Anderson **SESSION 1: Sea Change – A National Perspective**
General Manager, Eurobodalla Shire Council (NSW)
Brydon King Manager Planning and Development, Surf Coast Shire (VIC)
John Coombe Chief Executive, Alexandrina Council (SA)
- 10:00-10:25** **SESSION 2: KEYNOTE ADDRESS - SEA LEVEL ON THE RISE**
Dr John Church Centre for Australian Weather and Climate Research, CSIRO
- 10:55-11:50** **SESSION 3: THE GEORGE REPORT: The Time to Act is Now**
Ms Jennie George MP Standing Committee Chair and Member for Throsby
Cr Jan Barham Mayor Byron Shire Council & Vice President General NSW LGA
Mr Andrew Beatty Partner, Baker & McKenzie
- 11:50-12:45** **SESSION 4: Our Vulnerable Coast**
Prof Bruce Thom Chair, Australian Coastal Society
Prof Barbara Norman Urban and Regional Planning, University of Canberra
Cr Paddi Creevey Mayor, City of Mandurah WA
Dr Bruce Harper Principal Professional Environment and Risk, GHD Pty Ltd
- 13:45-14:30** **SESSION 5: Community Engagement with RDA Committees**
Cr Ian Tiley Chair, RDA Committee for Northern Rivers (NSW)
Cr Debbie Blumel Chair, Sunshine Coast RDA Committee (QLD)
Mayor Milton Evans Chair, Southern Western Australian RDA Committee (WA)
Steve Kozlowski Gippsland RDA Committee (VIC)
- 14:30- 15.30** **SESSION 6: Coastal Infrastructure**
Stephen Alchin Executive Director Planning, Infrastructure Australia
Dr Ian Joliffe Principal Water Engineer, GHD
- 16:00- 17.15** **SESSION 7: CONCURRENT WORKSHOP**
Facilitated workshop - Development of a strategy to support the adoption of the recommendations of the Parliamentary Coastal Inquiry

WEDNESDAY 3 MARCH

09:00-10:15

**Professor Edward J Blakely
Deb Cox and Fiona Egger
Pam Brook**

SESSION 8: Creating Sustainable Economic Options for Coastal Communities

Blakely Global
TV writers and producers, *East of Everything*
Sea changer and proprietor Brookfarm, Byron Bay

10:45-11:45

**The Hon Justine Elliot MP
Andrew Howe
Cr Patricia Chigwidden
Cr Fergus Thomson**

SESSION 9: Coastal Populations

Minister for Ageing and Member for Richmond
Senior Demographer, Australian Bureau of Statistics
Deputy Mayor, City of Victor Harbor (SA)
Mayor, Eurobodalla Shire Council

11:45-12:30

David Cant

SESSION 10: Coastal Housing Options

Chief Executive Officer, Brisbane Housing Company

13:30- 15.00

SESSION 11: CONCURRENT WORKSHOP

Inaugural General Meeting of the Australian Coastal Alliance – established as an interface between the end users of coastal research and research providers

15:30- 16.45

SESSION 12: FORUM DISCUSSION - Coastal Policy Priorities

Facilitated Forum Discussion and Agenda Setting with Taskforce delegates and other coastal stakeholders to identify current priority issues for inclusion in the National Sea Change Taskforce Coastal Policy Framework. Session included the following presentations:

**Anne Leitch
Andrew Hammond**

CSIRO Sustainable Ecosystems
Chief Executive Officer, City of Rockingham

TUESDAY 2 MARCH

Welcome - Barry Sammels, Chair, National Sea Change Taskforce

Barry Sammels told delegates the conference was taking place at a critical time for the people who live in the coastal communities and for the people responsible for planning and managing the coastal zone. Population growth and development pressures along the nation's coastline continued to place enormous pressures on coastal LGAs. Many of them are pushed to the limit to meet the increase on demand associated with that growth.

Apart from lacking the resources to meet continuing growth in demand for infrastructure and services, coastal councils were also at the forefront of having to meet the needs of ageing populations. They also face the challenge of how to prepare for the impact of climate change. Barry Sammels said it was important to note that while climate change is a matter of conjecture for many people, for coastal councils it is a matter of reality they have to deal with every day. They need to carefully consider the potential impact of rising sea levels and more frequent and severe extreme weather events every time they consider an application for development in potentially vulnerable coastal areas. They also need to consider the legal implications. There is a growing body of common law which indicates the courts will have a direct and powerful influence over how these developments are assessed in the future.

Preparing for the impact of climate change is one of the biggest challenges facing coastal councils and is beyond the capability of a single local government authority to devise an effective response. Nevertheless, from what we now know, it seems the local government sector in some respects is further advanced in dealing in practical terms with climate change than the other two tiers of government. The government adviser Ross Garnaut has referred to climate change as the diabolical policy problem of the age. For us it is an issue that we already have to deal with day after day, together with the vast array of other issues that we deal with at a local community level. We don't have the time, the money or the luxury of pontificating about it. We have to get on with the job of managing it as best we can. Some of us have developed new and innovative approaches, which we'll be finding out about over the next two days.

That highlights one of the most important benefits of staging an event such as this - it provides a valuable opportunity for representatives of Australia's coastal councils and a broad range of other coastal stakeholders to share ideas and work together to develop strategies that will address the challenges facing our coastal communities and the coastal environment.

Over the course of the last year we have seen a series of developments of direct relevance to coastal LGAs. A little over a year ago we saw the introduction of the Federal Government's Regional and Local Community Infrastructure Program as part of the economic stimulus package. We also saw the establishment of the Australian Council of Local Government, which

was set up to achieve a more collaborative national approach between the local government sector and the Federal Government. We were pleased to be represented on this body. As Chair of the Taskforce I was appointed specifically to represent members of this organisation. Mary-Lou Corcoran, the Deputy Chair of the Taskforce and Mayor of the City of Victor Harbor was also appointed to the council.

Since then there have been other major developments. In October last year we saw the release of the report of the coastal inquiry conducted by the House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts. In our view this comprehensive and thoroughly researched report represents a landmark step towards the sustainability of the Australian coast and its communities. The 47 recommendations it contains are both practical and feasible. We thoroughly endorse those recommendations and are delighted that the Chair of the Standing Committee, Jennie George MP, the Deputy Chair, Dr Mal Washer MP, and their colleagues Nola Marino MP and the Hon John Murphy MP have joined us at this event to discuss the report.

The release of that inquiry report was followed only weeks later by the release of the Climate Change Risks report which provided national-scale mapping of residential buildings, coastal infrastructure, and industrial assets at risk from the impact of climate change. This report added further weight to the need for urgent action to address the impact of climate change and highlighted the vulnerability of coastal communities to the risk of sea inundation and erosion. It showed that up to 247,600 existing residential buildings would be at risk from sea inundation by 2100, based on a worst case scenario of 1.1m sea-level rise, which is higher than previously projected.

At the launch of the report, the Climate Change Minister, Senator Penny Wong, announced the establishment of a Coast and Climate Change Council chaired by Professor Tim Flannery. The Council was appointed to engage with the community and stakeholders as part of the process of developing a strategy for coastal adaptation. At this point I would like to welcome three members of the Council who have joined us at this event:

Professor Bruce Thom
Professor Barbara Norman and
Mayor Paddi Creevey of the City of Mandurah

They will be providing an outline of the Climate Change Risks report, what it means to coastal councils and the Australian Government's recently released position paper on adapting to the impacts of climate change.

The theme that emerges strongly from these two reports is that the *'Time To Act Is Now'*. As coastal councils dealing daily with this diabolical policy problem, we wholeheartedly endorse that sentiment. How we can go about doing that will be one of the key issues we will be considering over the next two days.

The focus at this conference is on outcomes. We will be preparing a communiqué, with your input, for presentation to Climate Change Minister Penny Wong and Environment Minister Peter

Garrett. These are the two ministers who referred the coastal inquiry to the House of Representatives Standing Committee on Climate Change, Water, the Environment and the Arts. We'll be doing that in the concurrent session being held later today, after afternoon tea.

We will also be further developing our coastal policy framework which will be used as the basis of an advocacy campaign during the period leading up to the Federal election later this year. You will find the current draft of the policy framework included as part of the conference papers you received on registration. We invite you to take some time to examine the draft framework and contribute your own comments and suggestions in the final session of the conference, to be held tomorrow afternoon.

Among the other topics we'll be examining during the conference are:

- The challenge of creating sustainable economic options for coastal communities
- The impact of ageing populations in sea change areas
- The role of the new Regional Development Australia Committees
- And we'll have an update on legal liability issues and planning for climate change.

At this point I would like to acknowledge the strong support we have received from the organisations sponsoring this conference. Without their help and encouragement it would not have been possible to present the program of speakers that we have organised. I would like to specifically acknowledge:

The Australian Department of Infrastructure, Transport, Regional Development and Local Government
the professional services firm GHD Pty Ltd
and Byron Shire Council

I welcome each and every one of you to this event. Whether you're a representative of a coastal council, a State or Federal policy maker, a member of a Regional Development Australia, a coastal research provider, or a representative of the private sector, I invite you to share your ideas and experience with each other as we work together to find sustainable solutions to the complex and difficult challenges facing our coastal communities.

SESSION 1: Sea Change – A National Perspective

Delegates were told that coastal councils and their communities are attempting to deal with an extraordinary and complex range of pressures. While growing numbers of people have been moving to non-metro coastal areas over the past decade resources have not moved with them. Coastal councils are struggling to meet increasing demand for services in their communities. Apart from on-going population growth, the challenges confronting coastal Australia include a shortfall in funding for infrastructure and services to meet continuing increase in demand, ageing populations – sea change areas are at the forefront of Australia's ageing population – climate change, obviously, and much more.

In this opening session the conference presented an overview of some of the issues facing coastal communities and the innovative steps that some coastal councils are taking to address them, starting with the issue of youth employment. This is a major issue in many coastal areas, where unemployment rates tend to be significantly higher than the national average. For young people about to leave school it is a particular challenge, and many of them find themselves having to move to the cities in search of work.

Eurobodalla Shire - Partners: Industry and Education Program

Eurobodalla Shire, on the NSW south coast, has adopted an innovative approach to helping young people find local employment. Paul Anderson, General Manager of Eurobodalla Council, told delegates the Partners: Industry and Education (PIE) Program had been developed to provide selected students at Eurobodalla High Schools with an opportunity to combine in-school learning with a Vocation TAFE course and structured on-the-job training. The initiative had been developed with the support of Eurobodalla Shire Council, NSW Department of Education, TAFE Illawarra and Country Energy. He said Eurobodalla Shire Council was involved because the Council's Youth Strategy had identified youth unemployment as a major issue for young people. In 2006 Eurobodalla Shire had an unemployment rate for young people of 15.5% against the State unemployment rate for young people of 11.5% and the National unemployment rate of 12.5%.

Eurobodalla Shire also experienced a higher than state average of young people leaving school in Years 9 and 10. More than 30% of young people aged between 15 and 19 years leave school at Year 10 and more than 20% of young people aged between 15 and 19 years leave school at Year 9. New Legislation in NSW from 2010 required all NSW students to complete Year 10. After Year 10 and until the age of 17 students would be required to be:

- in school, or registered for home schooling OR
- in approved education or training OR
- in full-time, paid employment (average 25 hours/week) OR
- in a combination of the above.

The PIE Project was modelled on the Lithgow Industry Links model which had previously been developed at Lithgow to create local employment opportunities for young people principally in the local mining industry. As part of the process of developing the PIE Project Eurobodalla council officials visited Lithgow to investigate how the Lithgow Industry Links model was developed.

In December 2009 Eurobodalla Shire Council auspiced a meeting involving the 5 High Schools in the Shire together with the Shire's further education organisations, DEEWR together with representatives of the local business community. The aims of the PIE Program were to:

- Increase retention rates among all young people
- Improve student engagement through curriculum options that are appropriate to the needs of our students
- Develop authentic and sustainable links between Industry partners and Schools to improve learning of the students
- Provide vocational pathways for young people that will promote further learning as a post school option
- Provide viable, alternative and authentic pathways for disengaged students.

Paul Anderson said the Pilot Program had begun in Term 1 2010 and was targeted at students in Years 9 to 11 at Moruya High School. Students were to be enrolled at Moruya High School and Moruya TAFE and follow a program that will lead to the completion of a Certificate II level qualification. The students would be involved in a rotating work placement / work experience program where they will work one day per week for the whole term. In the following term the students would be placed with another employer. Over the course of two years, each student would work for up to seven different host employers. During the first term students would work through a series of work readiness activities to prepare them for their work place learning. He said the program in Term One included the following components:

- Development of Personalised Learning Plans for each student
- Work Readiness Program
- Resume Preparation
- OHS/Construction CIC Training
- First Aid Certificates
- Personal Presentation Workshop
- Mock Interviews
- Workplace Orientation Sessions
- Industry Visits
- Workplace Induction.

In Terms 2, 3 and 4 students would gain work experience or work placement in the following industries:

Years 9 and 10 – Hairdressing, Automotive, Business Services and Construction

Year 11 – Home and Community Care, Hospitality, Construction and Horticulture

Surf Coast Shire - Torquay-Jan Juc Project 2040

Continuing population growth and associated development pressures is an issue facing most coastal LGAs. Finding a way to respond appropriately to those pressures is never easy. Brydon King, Manager - Planning & Development with Surf Coast Shire, on the Victorian coastline west of Geelong, provided an outline of how the Shire responded to community concerns about a growth framework plan for an area identified by the Victoria State Government as a growth corridor in the Torquay- Jan Juc area. The proposed development plan would have accommodated anywhere up to 12,000 residents.

Brydon King told delegates that the growth of the region and development of infrastructure had been a big driver of change in the region. The Victorian State Government has a focus on regional development and the G21 group of local LGAs is undertaking a Regional Land Use Plan to be clear about areas that can accommodate growth and those that can't.

Armstrong Creek, on the southern edge of Geelong (8 minutes from Torquay) has had significant impacts on the Torquay-Jan Juc areas, both positive and negative. Townships along the coastal strip have no opportunity for Greenfield growth. The emphasis in the coastal strip is on managing the character and landscapes in the area. Maintaining a non-urban break to southern Geelong is considered important. Maintaining the character of local coastal areas and hinterland is important in order to promote local tourism. The proposed development plan would have accommodated approximately 12,000 people and would include a new shopping area, recreation and community facilities including two schools. The level of growth was proposed over a period of 30 years and assumed a level of acceptance based on a 2007 plan and the history of growth that had occurred since the 1980s.

Community response was overwhelmingly against the proposal generating some 2800 submissions. Residents of Bellbrae were concerned that the proposal would swamp their town and led the campaign against the development.

Surf Coast Shire Council acknowledged community concern about the proposal and that negative response was not just about Spring Creek but about growth in the Torquay-Jan Juc areas generally. The Council recognized it had had an important role and function in a region experiencing high growth and placed particular focus on submissions related to growth management in response to the coastal location and sense of place.

The Shire abandoned the Spring Creek growth plan in favor of undertaking a broader assessment of the growth setting of the Torquay-Jan Juc area. This led to the development of the Torquay-Jan Juc 2040 project as a new way of linking future land use with the community's aspirations for its future. The project is designed to develop a growth management plan for Torquay-Jan Juc that looks at community aspirations, preserving the community and region's strengths, outlines what level, scale and direction of growth is sustainable, defines a local sense of place and looks at regional factors. The project aims to foster a liveable, cohesive, connected community enjoying quality of life now and ensuring protection of these elements for future generations.

Surf Coast Shire is working in partnership with the State Government on the project. The State Government's involvement is based on a partnership model to help support the development of sustainable, liveable communities which build on a sense of place. Effective community engagement has been fundamental to the process. This has involved a two-way communication process, with both an educative role for community as well as providing an opportunity for community feedback.

Byron King identified the key elements of the project as follows:

- Aligning community aspirations to land use planning in a climate of strong growth
- Understanding the impacts of strong growth on community identity

- Identifying Torquay-Jan Juc's capacity to accommodate growth in a region with a city heading towards 0.5 million
- Understanding the positives and negatives of growth at a township level and considering the impacts on its identity

Alexandrina Council – Addressing Climate Change Risks

Climate change is an issue for all coastal councils and coastal LGAs are at the forefront of responding to the risk of rising sea levels and other climate change impacts. Councils are faced with the challenge of how to enhance resilience of their communities through the development and integration of appropriate adaptation strategies. John Coombe, the Chief Executive Officer of Alexandrina Council in South Australia, outlined to delegates the steps that his council was taking to address climate change risks. He told delegates it would be easy for coastal LGAs to set adaptation measures to one side as they dealt with what appeared to be more immediate and pressing issues. It was important from a risk management point of view, however, not to take this approach. He said what his own council was doing was going through a process of identifying risks, legal liabilities and legislative non-compliant issues and determining relevant actions to link into the council's strategic plan. He said it was important not to underestimate how significant these issues would be for local communities in five, ten or 20 years time.

The first step was to identify key impacts across the entire range of council operations, including:

- Development assessment and building application compliance.
- Home and community care/ Health of the aged and vulnerable.
- Transport provisions.
- Health risks including European Wasps, Ross River virus
- Flora species migration/ destruction of native habitats.
- Acid sulphate soils.
- Councils tree maintenance program.
- Community health issues arising from poor water quality.
- Residential property devaluation, which could impact on tourism
- Provision of shade structures.
- Maintaining the aesthetics/ amenity of open space.

Having identified these risks the council then invited members of the community to attend workshops to discuss climate variables such as reduced rainfall, bushfire risk, extreme heat and other potential impacts. One issue discussed at the workshops was the impact of temperature extremes on vulnerable members of the community, including the elderly, and increased demand for facilities such as swimming pools and council owned buildings with air conditioning such as the library, day care centre or community centre.

John said they then identified and aligned those risks with council's strategic plan and applied a risk rating from extreme, high, medium or low. We then asked ourselves what is council's involvement in this area and what are the adaptation measures we need to address. Will there be an expectation, for example, that transport for the elderly will be available on days of very high temperature? What are we doing about that? Do we need to discuss this with the State Local Government Association and develop a partnership aimed at achieving equity of access to public transport that is similar to the access enjoyed in the metropolitan area, because people who live in regional areas should not be disadvantaged? It will take us another three or four months to complete this process.

He concluded by saying that we cannot ignore the impact of climate change on our communities and the longer we ignore it the greater the risk it poses to our councils and the greater the potential for legal liability.

SESSION 2: Keynote Address - Dr John Church – Sea Level on the Rise

This second session on the program considered the current state of scientific knowledge on one particular aspect of climate change - sea level rise. The speaker was Dr John Church, an oceanographer with the Centre for Australian Weather and Climate Research and the Antarctic Climate and Ecosystems Cooperative Research Centre. Dr Church is a Fellow of the Australian Academy of Technological Sciences and Engineering and is acknowledged internationally as a leader in research relating to sea level rise.

Dr Church told delegates that sea level has risen more than 120 metres since the last glacial maximum, approximately 20,000 years ago. Since that time, the rate of sea level rise has varied from about 1 metre to as high as 4 metres per century. Human society has developed in coastal areas over a period covering approximately the last three thousand years. During this period there has been a dramatic increase in population in coastal areas but sea level has been relatively stable and in some places has actually fallen.

He said scientific research now indicated that sea level would continue to rise over the next century with the key impacts being inundation, more frequent and severe storm surges and significant coastal erosion. We need to be careful about the impact of these severe events on emergency escape routes to avoid the sort of crisis that occurred in New Orleans, where people could not escape during Hurricane Katrina. Dr Church said it was likely that civilisation would need to deal with millions of environmental refugees over the course of the 21st Century.

The evidence of observation and geological data indicated that the rate of sea level rise has increased since the 19th Century. The average rate of sea level rise during the 20th Century was 1.9 mm a year but measurements from 1993 to 2009 showed that sea levels were steadily rising

at a rate of about 3.2 mm a year. There was no evidence that this rate of sea level rise was slowing.

One of the major causes of sea level rise is thermal expansion of the ocean as a result of absorption of huge amounts of heat. Observations indicate significant warming of the ocean from 1960 to the present. The amount of heat contributing to this warming is enormous. Melting glaciers have also been a major contributor to sea level rise over the 20th Century. The potential melting of the Greenland ice sheet is a critical factor. Melting from the Greenland ice sheet has accounted for a relatively small contribution to sea level rise over the 20th Century but there is potential for dramatic increase in sea levels if global warming exceeds about 3 degrees for a sustained period. Under these circumstances it is likely that the threshold for melting of the Greenland ice sheet would be reached which would lead to the eventual elimination of the Greenland ice sheet and associated sea level rise of several metres. Ocean water can penetrate under the ice sheet, melting its base. As this penetrates further inland it allows outlet glaciers to flow more rapidly.

Dr Church told delegates that ocean and climate systems have a very long timeframe. Even if carbon dioxide levels in the atmosphere were stabilised at current levels sea level rise resulting from thermal expansion of the oceans would continue for centuries. He said coastal settlements would be impacted by a combination of sea level rise and more frequent and severe extreme weather events associated with storm surges. One in 100 year severe events are likely to occur several times each year by 2100. Our society has developed during a relatively stable period for sea level rise. This has allowed us to build right up to the coastline. But observations of current rate of sea level rise shows that it is tracking at the higher end of IPCC projections and is projected to be 0.8 metre to 0.9 metre by 2100. The science is clear. Ongoing sea-level rise is virtually inevitable. It is an issue with implications for now, the 21st Century and the longer term. Society needs to adapt to:

- Inundation, coastal erosion, wet land loss, aquifer contamination
- Flooding events – more frequent, more severe.
- Least developed nations and the poor most at risk. Local and regional planning.

He said we need to mitigate to avoid the most extreme scenarios. Without significant, urgent and sustained action, we could pass a threshold during the 21st C, committing the world to metres of sea-level rise as a result of the melting of the Greenland ice sheet. Short term emission goals are critical. We will inevitably need to deal with environmental refugees. This poses the question of not “if” but “when, where and how will we respond?” Observing, understanding and modeling the oceans and the ice sheets are key to reduce uncertainty and minimize costs. We need to improve and implement early warning systems. And it is critical that science, government, business and community partnerships are strengthened to address the risks.

SESSION 3: The George Report - The Time to Act is Now

This session considered the recommendations of the report of the coastal inquiry conducted by the House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts which was tabled in October 2009. Coastal councils believe that the report is a landmark document, with 47 recommendations which if adopted would help to address many of the challenges currently facing coastal councils and their communities. The George report, as it has become known, is seen by many coastal stakeholders as one of the most important steps towards the sustainability of the Australian coast and its communities for decades.

Jennie George MP

The first speaker in the session was Jennie George MP, the chair of the House of Reps Standing Committee that conducted the inquiry. She is the Federal Member for Throsby, in NSW and prior to entering Federal Parliament she was President of the Australian Council of Trade Unions, a position she held from 1996 until 2000.

Jennie George said coastal LGAs had made a significant input into the deliberations of the inquiry and she acknowledged the extensive input of the National Sea Change Taskforce, which went beyond the sometimes narrow confines of a natural resource management approach.

Although the inquiry took about 18 months to complete but in the view of the committee it was time well spent. We covered a multitude of issues during the course of the inquiry. I am pleased that the Government has established an interdepartmental committee to examine the recommendations and we have already had a response through the creation of the Coast and Climate Change Committee chaired by Professor Tim Flannery. We wanted our report to be a turning point as far as coastal management is concerned. The key message you can take from our report is the need for national leadership in a collaborative framework. We don't see national leadership as prescriptive, with one level of government telling other levels how to go about their business. But certainly we felt an urgent need for the national government, which has largely been absent from this space, to have a better handle in terms of the implications of climate change on settlements and critical infrastructure around the coast. We wanted our report to be practical in its orientation and enabling and empowering people at local government level to better go about the task of responding to climate change as a local level.

At the heart of our proposals is a new COAG Intergovernmental Agreement on the Coastal Zone. This agreement in our view would replace the complex and highly fragmented silo arrangements that currently apply cross jurisdictions, across sectors and across agencies. We believe that the full involvement of local government is vital to the success of many of the initiatives outlined in our report. During the inquiry many coastal stakeholders pointed to the model of coastal governance in Victoria and the Victorian Coastal Strategy 2008 and the arrangements that apply in that state in terms of the over-arching role of the Victorian Coastal Councils and the regional

bodies under that Council. In our view, having looked at a number of states, there was much to commend the Victorian model. We have also argued for the creation of a National Coastal Zone Database as a way of empowering people with the best scientific evidence that we have and which can be expanded over time to include information on environmental data and management and planning information relevant to the coastal zone. It is important that the information that science provides needs to be user friendly and accessible. We also need to have a greater level of community awareness about these issues. It is for that reason that we have suggested to the Government that the year 2012 be nominated as the Year of the Coast to help further build community engagement and awareness and to challenge some of the sceptics who have recently intruded into the debate.

During the course of the inquiry we found a greatly varied level of engagement across local government authorities across the nation in terms of responding to climate change. Some were at the forefront of integrating climate change into their planning regimes. Other were undecided about the extent to which they should deal with these issues. We found that the level of resources available to deal with these issues varied considerably and we have recommended that the Federal Government commission further study into the human and resourcing needs of local governments to effectively plan for and adapt to the impacts of climate change and that this study be carried out in conjunction with the Australian Local Government Association and the National Sea Change Taskforce.

In terms of climate change impacts at a local level, one of the key issues identified by the committee is that much of Australia's infrastructure is in the coastal zone and there are particular threats facing the coastal zone from climate change, involving significant socioeconomic costs. The Committee therefore recommended that the Australian Government ensure there is a comprehensive national assessment of coastal infrastructure vulnerability to inundation from sea level rise and extreme sea level events. The Committee also recommended we begin to review the building codes to make sure we are keeping up with the latest science and increasing resilience to climate change. We appreciated the fact that councils are often confronted with a shortage of funding and resources and we have recommended to the Minister for Infrastructure that the Australian Government give consideration to establishing a separate funding program for infrastructure enhancement in coastal areas vulnerable to climate change, with the sort of funding arrangements that applied under previous rounds of funding. Infrastructure enhancement is a critical issue and beyond the financial capacity of many LGAs to plan and adapt for the future. We also recommended the establishment of a Coastal Natural Disaster Mitigation Program to fund natural disaster mitigation projects in the coastal zone.

Jennie said the Committee greatly valued the work of the Taskforce in putting this issue in the broader context of population growth and the impact of that growth on the coastal environment and socioeconomic pressures in the coastal zone. We know that population growth in coastal areas is consistently higher than the national average and the impact of the huge influx of visitors during peak holiday seasons. We also know that influx is not factored in when governments make decisions about provision of services and infrastructure. Non-

metropolitan coastal areas are also characterised by higher unemployment levels, lower incomes and higher levels of socioeconomic disadvantage than the Australian population as a whole. We have therefore recommended to the Government that further work needs to be undertaken into socioeconomic vulnerability to climate change impacts, particularly in coastal communities. Many poorer people in my own area live on the shore of Lake Illawarra and would be the first to feel the impact of inundation and the negative consequences of climate change. I think this is a common feature in many coastal communities. We have also recommended that the Australian Bureau of Statistics provide accurate data on the numbers and impact of tourists in coastal areas to better enable resources to be matched with demand for infrastructure and services. I would like to acknowledge the valuable input that the Taskforce has had, particularly in relation to those socioeconomic issues.

Building on the work of the Taskforce and the Victorian Coastal Council our committee has also recommended the development of a coastal sustainability charter as part of the proposed Intergovernmental Agreement on the Coastal Zone. As far as local government capacity building is concerned we have argued for continuation of the Local Adaptation Pathways Program. We were very encouraged by the growing regional focus of vulnerability assessment that is being undertaken and the message that is coming through is that we need more consistent methodology for risk assessment to be conducted at a local level.

The Committee argued for a continuation of the Climate Change Adaptation Skills for Professionals Program so that we have more appropriately skilled coastal planners and engineers being trained and graduating from our tertiary institutions. We also argued for funding support for the ongoing activities of the Australian Coastal Alliance because we need a better interface between coastal research organisations and LGAs. We also took up the suggestion of the Wentworth Group that the Government examine the establishment of a system of national coastal zone environmental accounts based on the model developed by the South East Queensland Health Waterways Partnership.

Jennie said that the committee currently has 47 recommendations before the two Ministers who referred the inquiry to the committee and already we have seen the creation of the Coast and Climate Change Council. At the Climate Change Forum held in Adelaide the Minister announced that the work of the committee would continue and we are pleased that has happened. We are also pleased that the first pass of the national coastal vulnerability assessment has been completed. The committee believes there is a need for better integration of coastal research reports. They need to be made accessible and user friendly to enable people in local government to better plan for the future.

As you would be aware the issue of legal liability and insurance issues are emerging issues. We have dedicated a whole chapter to these sort of major issues that hadn't previously been given much attention. Uncertainty about legal liability associated with planning and development was one of the issues raised frequently and we have observed a concerning trend for a growing number of parties to resort to litigation over coastal property climate change risks. These trends

seem likely to continue. This is an area where the law needs to catch up with practice on the ground and because our committee didn't have the expertise to do more than recount the complexity of these issues we have recommended that the Australian Law Reform Commission undertake an inquiry into the liability issues facing both public authorities and property owners in relation to climate change and also look at the issue of indemnification of local government authorities for their decisions. Similarly, the insurance issues relating to climate change represent another very significant national issue. We have highlighted this in our report and have asked that the Productivity Commission undertake some work in that space.

The report calls for action to be taken now and identifies areas in which there can be national leadership. Along with you, I am hoping that the conversation, such as the one we had at the Adelaide Climate Change Forum and this one, impresses on our Government that the time to act is now. There is a great deal of anticipation around the nation, particularly among people in local government, that there will be an early and positive response to the recommendations made in our report.

Eighteen months ago we wouldn't be having the kind of conversation that we had at the Adelaide Forum or the discussions we are having here, so in a relatively short space of time we have moved ahead very significantly. We hope that if the Government responds positively to our recommendations that most of the pressing issues that confront you at the moment will be properly dealt with and that you will be adequately resourced to empower you to make good decisions for the future.

Andrew Beatty

There are a number of uncertainties and certainties concerning local governments planning to undertake adaptation measures. First the uncertainties:

1. The timing and nature of natural impacts caused by the progress of climate change. This uncertainty is causing inaction on the part of some arms of government.
2. The roles of the three tiers of government continue to shift and you see politicians talking about the 'blame game', which is really a matter of blaming levels of government other than your own.
3. How the politics of mitigation is taking place at a time of great flux and carbon fatigue post Copenhagen, which is characterised by scepticism and climate change hostility.

These uncertainty factors are making it difficult for people to make decisions. Now for the certainties:

1. Land values – a recent paper delivered to the Australian Property Institute laid out the case for land valuers taking into account the impact of climate change when valuing land. This will inevitably flow into the behaviour of the banks.

2. Insurers have a high aversion to risk, and once again this will flow into behaviour exhibited by banks.
3. Landowners will do what they can to protect land and property even where that might be irrational in the long term. Whatever happens legally and politically, land owners will always try to protect their land.
4. The role of judges as lawmakers as opposed to legislators as lawmakers is likely to grow. There will be many more cases such as those brought before VCAT in Victoria, the Supreme Court in South Australia and those brought in relation to Anvil Hill and Sandon Point in NSW. Wherever there is a statutory vacuum the common law will seek to fill it as property owners try to protect their land.

The predicament for coastal LGAs is that they sit in the middle of the four connected certainties but will be buffeted by the prevailing winds of the three uncertainties. So, how are they to discharge their statutory functions effectively? They are creatures of statute, relying on State Governments and the State Governments in turn rely on the Federal Government for funding.

Local government has a number of tools at its disposal. Councils have the power in zoning certificates, they have power to make subordinate policy instruments, such as DCPs. They have the power to determine applications and they have powers to compulsorily acquire land, which may open a claim for compensation.

As far as State governments are concerned, they have the power to rezone land, even though that rezoning may have been initiated by local government. States also have the power to promulgate guidelines, to deal with issues such as contaminated land, for example, and they also have powers of compulsory acquisition, which may lead to compensation.

The Federal Government has extensive scientific resources, such as CSIRO and GeoScience Australia. It also has the power of compulsory acquisition. It has the potential to show coastal zone leadership, but because of constitutional restrictions it may have to rely on the States to cede it powers in this respect.

One major question is whether we will see more rapid law reform concerning local councils and climate change decisions and immunity of councils in relation to these decisions if some LGA is sued successfully in negligence. If you draw lines on a map or you change lines on a map it is all about capacity to pay. Who is going to pay for these hard decisions to protect infrastructure and ratepayers?

Planners and elected representatives cannot ignore the science. The science is known – it is out there and cannot be put back in the bottle. If a council decides against the scientific evidence that it is safe to build houses on land that is vulnerable to inundation, and someone gets hurt, the council will be sued. It is unsafe legally to ignore the science. Science should inform guidelines, which should underpin sound planning decisions. Councils should be indemnified if they act in good faith and base their decisions on sound scientific guidelines.

Coastal councils currently find themselves in a predicament. They are operating in an environment of great uncertainty. Unless action is taken by lawmakers to reform the law to provide them with greater protection the void will be filled by the unelected lawmakers - the judges.

SESSION 4: Our Vulnerable Coast

This session considered the *Climate Change Risks to Australia's Coasts* report released by the Minister for Climate Change, Senator Penny Wong, in November 2009. The report highlights the vulnerability of coastal communities to the risk of sea inundation and erosion and provides national-scale mapping of residential buildings, coastal infrastructure, and industrial assets at risk from the impact of climate change.

Professor Bruce Thom – President, Australian Coastal Society and member, Coast and Climate Change Council

Professor Bruce Thom is a geomorphologist who was scientific adviser to the Department of Climate Change on the *Climate Change Risks Report*. He is a member of the Coast and Climate Change Council and is acknowledged as one of Australia's leading experts on coastal environments. Professor Thom told delegates that when the Department of Climate Change was formed in 2007 it took on board some of the previous Government's climate change initiatives with respect to climate change adaptation on the coast and emphasised the need for greater understanding of the vulnerability of the Australian coast. Already at that stage the Prime Minister's Science and Engineering Council had produced a report indicating a considerable degree of risk to residential property and critical infrastructure.

He said the *Climate Change Risks to Australia's Coasts* report looked very carefully at the coast using some different tools including the Smartline Coastal Geomorphic Map, which is a detailed map of the coastal landform of continental Australia. As a geomorphic map, it represents not just the topography of the coast, elevation and shape of coastal landforms, but also provides an overview of the types of coastline likely to experience some sort of change in the future. The report provided a medium resolution study of residential risk around the Australian coast, using a digital elevation model. This first pass assessment indicated that some 250,000 residential properties are at potential risk. It has now been agreed this methodology needs to be updated with high resolution digital elevation modelling which we now have the capacity to use. The report did not go into the specifics of infrastructure other than to indicate what types of infrastructure could be at risk, including Brisbane airport, Sydney airport and a number of Sydney Water assets.

In Chapter 6 the report touched on broader issues including barriers and impediments to adaptation to climate change on the coast such as institutional barriers and issues such as building codes. When you look at the issues identified in that chapter you find there is quite an overlap with the recommendations from the coastal inquiry report by the House of Representatives Standing Committee. The Minister has indicated the intent of the Government to examine these issues. One specific step required is to build the capacity of local councils to deal with these issues. The Climate Change Forum held in Adelaide in February provided an opportunity to consider a number of issues raised in the coastal inquiry report. The idea behind this forum was to bring together some of the thinking from across Australia – from the States and local government, from researchers and industry – to provide the government with some views on many of these issues. The members of the Coast and Climate Change Council and Department of Climate Change are currently working through a lot of the points raised during the forum.

At the conclusion of the forum, the Minister announced that the Australian Government has put together a position paper on adapting to climate change in Australia. This is an important step on the climate change journey. As Jennie George MP pointed out earlier, the call for national leadership on coastal management came up again and again during the course of the Parliamentary inquiry. I think it is worth noting that that call has been going on for decades, but successive governments have ignored the advice that has come from a series of reports including the report of the resource assessment inquiry report of 1993. This current *Climate Risks* report takes us into a new climate change era, and it takes us into this new era with a key message: some climate change is unavoidable. The science is clearly telling us what is going to happen and it is looking worse and worse in terms of the types of impacts we have to adapt to. The Federal and State governments are taking that seriously. They all accept that climate change is unavoidable to some extent and they are all doing something in this space. The level of uncertainty in relation to the impact of climate change will vary at a national and at a local scale, but at least we now have a Commonwealth statement in which coastal management and infrastructure are singled out for special attention.

The second aspect of the discussion at the Adelaide Climate Change Forum was the importance of the role of COAG. One matter that has been discussed is that COAG represents the Commonwealth and the states. While local government is represented by ALGA, it does not have a specific role other than to act as an observer. The forum sent a clear message to government in relation to this. It said: please give local government a proper role in relation to climate change adaptation and mitigation. As Paddy Creevey made clear at the forum, there need to be some clear directions coming out of COAG which mandate actions across all levels of government. There need to be some clear signals from COAG that will have to be accepted by all levels of government.

The report of the coastal inquiry is currently being reviewed by an interdepartmental committee, in which the Department of Climate Change is playing a key role. That committee is looking at the inquiry recommendations in detail. The announcement that the Coast and Climate Change Committee will be continuing until at least October this year means it will continue to have the opportunity to provide independent input on policy and discussions in relation to these matters.

The Commonwealth is obviously a major player in funding research and it intends to continue that particular role. Major players such as CSIRO and GeoScience Australia are working in this space to develop better and better tools. Visualisation of where risks are projected is one of those important tools and we now have the capacity to prepare high resolution digital elevation models of the land and the sea. The auditing of infrastructure is another area in which the Commonwealth is active at the moment, in particular auditing of critical infrastructure such as airports and infrastructure associated with public utilities. Many of us will remember the 2007 floods in Newcastle and the impact they had on services such as power and water, which failed to function. We need to understand more about where infrastructure is at risk in particularly vulnerable areas and where facilities such as hospitals and nursing homes are at risk.

The other issue that was raised again and again at the forum was the need for consistency in planning principles, in codes and in standards. This is becoming more and more critical, particularly with respect to developing risk management frameworks and risk assessments. The Commonwealth is clearly interested in supporting the states and local government in this area and has already started this process in terms of establishing a hierarchy of standards with the aim of having a consistent set of standards that all states and councils can apply with respect to risk and helping to provide guidance on what type of development can go in what areas, so that you could have playing fields in high risk areas but you would not put hospitals or nursing homes in such areas. The Commonwealth is particularly interested in developing this type of consistent hierarchy at a national level.

The issue of education and communication about climate change adaptation is very important. The coastal inquiry report stressed the point that - the time to act is now. There is no doubt that there are things we can do now which will make it a lot less difficult for future generations. So, how can we communicate that and how can we help our communities understand that? We need to raise the awareness of people working in the professions – the architects, the planners, the lawyers and the builders – all the professions need to have urgent and ongoing input into what we know about the science, what we know about the impacts and how this can be communicated to our communities. Finally, we need to consider the question of how to mainstream climate change adaptation into government processes. We can't isolate climate change into environmental departments or sections of local councils. We have to mainstream adaptation thinking through our systems of financial management and into our planning processes.

Professor Barbara Norman - Foundation chair, Urban and Regional Planning, University of Canberra, and member, Coast and Climate Change Council

Professor Norman is a life fellow and former national president of the Planning Institute of Australia and has a distinguished career in urban planning. She spoke to delegates about the planning implications of the *Climate Change Risks* report.

Professor Norman said what was needed in Australia was sustained, long-term, considered evidence-based policy action and in this respect the National Sea Change Taskforce has done an outstanding job. She said her primary interest, as an urban and regional planner with approximately 30 years of experience, is the intersection of urban planning, population growth and the projected impact of climate change.

I think we are at a tipping point in terms of managing growth in Australia and nowhere is that more clearly evidenced than on the coast. Urban growth, of course, comes in different shapes and sizes. We have to be mindful when having these conversations that urban growth changes in all settlements, whether it's Darwin, Hobart, Mandurah or Bondi. The other important thing we need to bear in mind is the hierarchy of coastal settlements. My colleagues Nicole Gurrán and Ed Blakely, in their research work for the National Sea Change Taskforce, developed a hierarchy of coastal settlements which I have found very valuable and have used in my own work. The five categories are as follows:

- Coastal Commuters - suburbanised satellite communities in peri metropolitan locations;
- Coastal Getaways - small to medium coastal settlements and groupings of settlements within three hours drive of a capital city;
- Coastal Cities - substantial urban conurbations (populations above 100,000 people) situated beyond the State capitals;
- Coastal Lifestyle Destinations - predominantly tourism and leisure communities, located more than three hours drive of a capital city; and
- Coastal Hamlets - small, remote coastal communities often surrounded by protected natural areas, with populations below 15,000 people and situated more than three hours drive of a capital city.

We have seen a dramatic change in the scale and rate of urban development. The rate of change is what we are really challenged with now, together with the pace of change in scientific evidence of climate change. That dynamic brings us to the point where we are now planning for increased risk and uncertainty.

In my view, our planning system is not prepared to deal with that. How often do we review our major metropolitan plans for our cities, or our strategic plans in a local government area? How often do we review our state planning legislation? At best we may review our strategic plans maybe once every five years. Review of state planning legislation may be even longer, up to 20 or 30 years, and you can find this all over Australia. We have got this amazing dynamic happening – the scale and rate of change in urban growth and the pace of change in scientific

evidence about climate change – on the one hand, and a very static planning system that is not prepared to respond to that challenge. To further complicate the equation, we now have the recent release of the Intergenerational report with a projected population estimate of 35.5 million by 2050, and remember this is a sort of business as usual case. It is a projection and it doesn't mean that we will end up with that figure. The National Sea Change Taskforce has looked at that increase and worked out that we could end up with something like another ten Gold Coast cities on the eastern seaboard. Are we ready for that? I don't think so!

We need to be planning for climate change in that context, which brings me to the next point: Federal action. I think there have been some really significant steps forward in recent times. We have spoken about the Federal Parliamentary inquiry into coasts and climate change. We have mentioned the 2005 Sustainable Cities report, which contains some very good ideas, including a sustainable development charter and a proposed Sustainable Planning Commissioner. I think that COAG made some important decisions last December on strategic planning criteria for local planning. They also made an important decision about managing disastrous events. There is no doubt we need to have much closer links between the Attorney General's Department, strategic planning and infrastructure planning through the Department of Infrastructure, Transport, Regional Development and Local Government, and the Department of Climate Change. If we could get these three departments working well together in terms of policy integration at a national level I think we would be much better off.

My argument is that we need a national settlement strategy to deal with managing urban growth, projected population growth and the impacts of climate change. This task is way beyond the capacity of one local council or one state government. It is a responsibility that the Federal Government needs to take on board. When I say a national settlement plan I don't mean some top down kind of 1970s master planning process. Partnership is critical between local, state and Federal governments. The Federal Government should be an enabler, to be there to assist you do your job and to help you deal with the issues you are facing. We need national policies that influence what's happening in coastal planning, infrastructure and policy integration, then we need state planning policies and coastal settlement strategies and climate change adaptation plans. These three levels of government should all be working together.

We will not be able to solve this problem by planners talking to planners. Yes – planners have a contribution to make. Politicians have a contribution to make. But industry also needs to be part of the discussion because the economics need to stack up. Just before closing, there are six principles that I would like to leave with you which would help to effectively guide this process: These are the need for:

1. Agreed and shared outcomes between the three levels of government
2. An adaptive and systems approach
3. Regional planning
4. Regional governance arrangements for implementation
5. Capacity building for coastal planning
6. Long term monitoring and planning research

The other important ingredient that is needed in planning for risk and uncertainty is effective community engagement. I am absolutely convinced that we need local input and local knowledge combined with the relevant scientific knowledge to find a solution to this challenge.

Dr Bruce Harper - Principal Professional Environment and Risk, GHD Pty Ltd

Dr Harper told delegates that coastal councils have the toughest job in terms of managing the risks associated with climate change. They are required to make the big decisions. Long term planning was the key to sustainability and long term planning needs good information. Good information takes time and considerable effort and is also costly. Coastal LGAs need adequate funding to do this. They cannot do it alone. They need the support and assistance of Federal and State Governments and suitably qualified professional advisors.

The First Pass National Assessment in the *Climate Change Risks to Australia's Coast* report, produced by the Department of Climate Change, does provide a useful national perspective of possible impacts. It provides a good introduction to the concepts of coastal risk and is recommended reading for people who would like to find out more about the science of climate change. It outlines what is needed in the way of national policy development and broad funding allocation. The report is not as useful for individual councils having to make their own planning decisions because it does not provide the local information that individual LGAs need. There is a need for further investigation in order to provide the required level of detail. He said there were some limitations in the report. There is an issue, for example, concerning the lack of spatial detail which could lead to misleading conclusions in regard to some areas likely to be inundated. From an engineer's point of view he was also concerned there was a lack of hydrodynamic and hydraulic effects in the analysis. Similarly, the report assumed there would be no morphological adjustment and that nature would not have the capacity to adapt to the impact of climate change. The report was generally based on one worst case scenario, a projected sea level rise of 1.1 metre by the 2100 and does not use the best available information on coastal hazards, such as the large amount of information available of storm tides and high tides.

The bad news for coastal councils in the report is that the principal coastal threat from climate change is sea level rise and many coastal areas will be significantly and adversely affected within the next 100y; some within the next 50y. The implications for coastal areas experiencing rapid population growth were significant and this growth is a principal driver of increasing coastal risks. Many councils will need second pass or even third pass assessments for their planning needs to better understand present climate risks, identify the impacts, which are driven by the hydrodynamics, and consider climate change sensitivity analyses. He said ultimately his job as an engineer is to provide quantitative risks assessments. This information is highly statistical.

It doesn't all have to be bad news for coastal councils because there is time to "get it right". This is because sea level rise is likely to be relatively slow compared with the natural climatic

variability. Some coastal systems may be able to naturally adapt and some areas may not be affected for generations. We do have significant analytical resources available. There are many tools available but insufficient funding to enable them to be used effectively. Dr Harper said there is no specific evidence that any coastal community has already been significantly impacted by “climate change” influences and that it may take many decades for some effects to become obvious but we have to accept that it will happen.

He said that his speciality is in the area of tropical cyclones. The good news is that recent research had indicated that these are expected to be significantly fewer in number, up to 34% less frequent, but the ones we do have are likely to be more intense. Importantly, it is not likely that the regions currently affected by tropical cyclones will change very much. Earlier reports, predicting increases in the frequency of tropical cyclones, have been disproven.

The Engineers Australia National Committee on Coastal and Ocean Engineering had produced *Guidelines for Responding to the Effects of Climate Change in Coastal and Ocean Engineering*, which was first published in 1991. This was revised in 2004 and is available as a download free of charge. It was currently being further revised and updated. This could be used as a second pass to determine risk. It shows what sort of studies you need to undertake to improve your knowledge in this area. This could lead to a third pass assessment which would bring together appropriate expertise on climate, hydrodynamics and statistics. What is needed is a robust knowledge of present climate variability using appropriate models, data and verification to arrive at regional climate change scenario sensitivity analyses. Detailed vulnerability analyses could then be used to prepare probabilistic (quantitative) risk assessments for assets in the coastal zone which could be used to develop specific recommendations for planning.

Cr Paddi Creevey - Mayor, City of Mandurah and member of the Coast and Climate Change Council

Paddi Creevey told delegates she had had the opportunity to discuss the issue of climate change and the Government’s recent *Climate Change Risks to Australia’s Coast* report with a number of LGAs around Australia and the issue that had emerged in these discussions was the issue of capacity to undertake vulnerability assessment and risk analysis. On the one hand you see work being undertaken at a national level but coastal councils need a third pass assessment. If we don’t have that we will not be able to make appropriate local or regional decisions. She told delegates that what is needed is national leadership not funding that depends on the best submission writers. The funding needs to be directed to where the information is telling us it is most urgently needed.

The other thing that is urgently needed is effective community engagement. We know that many people living in coastal communities say that ‘nothing has changed’. LGAs need to deal with this. The impacts are not expected to occur for a long time – possibly decades – but we have a duty of care to make decisions now. We therefore need to bring our communities with us

to make these decisions now, so that children who are in school today don't inherit the problems of poor decision-making on our part.

We support the idea of national leadership but we urgently need the Federal Government to adopt the recommendations of the George coastal inquiry report. If we do nothing else from this conference when we go back to our councils we should write to our local MPs and members of the Government urging them to adopt and implement the recommendations of the report.

The other thing we need is a new story. We need clever minds to get together to do the social research needed to understand what our communities think about this and then we need to develop the story to inform people who are struggling to understand what this is all about and how it will affect them. Self interest is the greatest motivator - when you have to consider how climate change is going to affect you in five or 40 years time. These are the sort of stories we have to develop so that our communities will help us make the decisions we have to make. We are going to need effective communication strategies to do that.

SESSION 5: Community Engagement with RDA Committees

Cr Ian Tiley	Chair, RDA Committee for Northern Rivers (NSW)
Cr Debbie Blumel	Chair, Sunshine Coast RDA Committee (QLD)
Mayor Milton Evans	Chair, Southern Western Australian RDA Committee (WA)
Steve Kozlowski	Gippsland RDA Committee (VIC)
John Coombe	Adelaide Hills, Fleurieu and Kangaroo Island RDA Committee (SA)

(Report on this session to be added)

SESSION 6: Coastal Infrastructure

Stephen Alchin - Executive Director Planning, Infrastructure Australia

Research projects commissioned by the Taskforce have identified that all coastal councils report a shortfall in infrastructure and lack the capacity to finance these shortfalls through existing sources, such as grants, rates and developer contributions. The research has established there is a need to expand and upgrade services and infrastructure so that they are comparable to those in metropolitan areas. Gaps include insufficient physical infrastructure for existing and future population and visitor needs, including roads, sewerage systems, water services and public transport.

Infrastructure is a challenge for coastal communities. It is not only the continuing increase in demand to meet the needs of expanding populations. There is also the task of adapting infrastructure to prepare for the impact of climate change adaptation. This session focused on the topic of coastal infrastructure. The first speaker was Stephen Alchin, Executive Director, Planning with Infrastructure Australia. He told delegates that in 2008, Infrastructure Australia identified nine key national infrastructure challenges facing Australia. These are to:

- Deliver better governance: inefficiencies and inconsistencies in governance adversely impact infrastructure operations and investment in Australia.
- Create competitive markets: regulatory complexity and competitive anomalies impede the operation of efficient and competitive infrastructure markets, including the development of a nationwide world-class communications network.
- One nation, one set of rules: inconsistent rules, legislation and regulations governing markets impede productivity and create unnecessary costs.
- Better use of existing infrastructure: changes in the operation, pricing or utilisation of existing infrastructure to solve problems without the need for investment in additional capacity.
- Climate change: in addition to requiring a shift to a low carbon economy, climate change is increasing the demand for improved infrastructure, such as efficient public transport systems and low carbon intensive methods of power generation. [Not going to concentrate on this in any depth in this address, as it is being covered in detail in a separate session. That said, climate change is clearly one of the major issues of our time, if not the major issue. Any discussion around infrastructure must consider climate change issues].
- Supporting our cities: improving the liveability, sustainability and productivity of Australia's major cities.
- Boosting exports: increasing the productivity of Australia's international gateways, making sure that they can meet the rapidly growing freight task without adverse impacts on community amenity.
- Supporting Indigenous communities: improving infrastructure in remote and regional Indigenous communities, and closing the gap in essential infrastructure and services between these and non-Indigenous communities.
- Supporting rural communities: improving the quality of life and economic prosperity in rural and regional communities.

In response to these challenges, Infrastructure Australia has identified the following priorities:

- A national broadband network: developing a more extensive, globally competitive broadband system;
- Creation of a true national energy market: more extensive national energy grids to enable greater flexibility and competition in the nation's electricity and gas systems, whilst creating opportunities for the development of renewable energy sources. IA is undertaking work on energy grids, esp. means of facilitating connection of renewable sources into the network;
- Competitive international gateways: developing more effective ports and associated land transport systems to more efficiently cope with imports and exports. IA and NTC are working on a national ports strategy;
- A national rail freight network: development of our rail networks so that more freight can be moved by rail. IA working on a national freight strategy;
- Transforming our cities: increasing public transport capacity in our cities and making better use of existing transport infrastructure;
- Providing essential Indigenous infrastructure: improved services for Indigenous communities; and

- Adaptable and secure water supplies: more adaptable and resilient water systems to cope with climate change. IA is undertaking work on urban water (security of supply) and regional water (especially water quality).

Stephen Alchin said infrastructure investment and regulatory reform are required to address these priorities and that the greatest infrastructure challenges will be in our cities as a result of projected population growth and the cost of building infrastructure in built up areas. ABS population projections indicate the capital cities (Statistical Divisions) will increase their share of national population. These numbers exclude adjoining areas such as the Lower Hunter region north of Sydney and the Gold Coast south of Brisbane. The absolute growth in city population is likely to be substantial:

- Sydney approximately 7.0m by 2056, ie 2.6m people more than now. Over half as big again as it is now.
- Melbourne approximately 6.8m by 2056, ie 3.0m more than now. Around three-quarters as big again.
- Brisbane almost 4.0m by 2056, ie 2.1m more than at present. More than double the present population.
- Adelaide approximately 1.65m by 2056, ie 500,000 more than now.
- Perth almost 3.4m by 2056, ie 1.8m more than at present.

Building new or upgraded infrastructure in cities is expensive, because surface corridors have not been reserved and motorway tunnels are now costing \$600-700m per kilometre. Building in established areas tends to be limited to particular hours, either because of noise impacts or because the existing infrastructure can't simply be closed during construction. On the other hand, expanding the spread of our cities is problematic, because, among other things, the cost of extending infrastructure networks, risks associated with peak oil and in some cases the impacts on arable land. The infrastructure and land use planning necessary to address change over half a century or more is arguably quite different from that associated with thinking about the next 10, 20 or even 30 years. That is why initiatives such as the COAG Cities taskforce is important.

One other factor that will present additional challenges is an ageing population, particularly in rural areas. By the 2040s about a quarter of the population will be over 65. The ageing of the population will pose ongoing challenges for government finances over the longer term. In fact the second Intergenerational Report indicated that by 2046-47, government spending is projected to exceed revenue by around 3½ per cent of GDP. Not only will ageing of the population place demands on government expenditure and revenues, it is likely to slow the rate of economic growth. The Intergenerational Report indicated that while labour productivity is projected to grow over the next 40 years at around the same rate as in recent decades, the growth rate of real GDP per person is projected to slow because of the ageing of the population.

This has major implications for Governments at all levels across the nation, including for local government, where seniors often have access to rate rebates. These pressures will be even stronger in many rural areas, where there are declining populations or where there are large numbers of retirees. IT technology will be critical to supporting the productivity improvements necessary to maintain our standard of living in a fiscally constrained world, both to moderate and change demand for services, and to provide better quality information for more efficient asset management. The broadband network is vital in that regard.

Is decentralisation the answer? Potentially, however, the scale of projected growth in our cities makes it clear that, to be successful, we will need to apply sound policy consistently and over the long-term. 'One-off' initiatives or policy applied for a short period only may not have the enduring effects required to attract people from our cities to the regions. As we saw in the 1960s and 1970s, the intra and inter-governmental challenges should not be under-estimated. We need to consider issues such as: what are the factors that would influence people and businesses to set up outside our cities? What policies need to be pursued to influence those factors? What do those factors tell us about attempting to promote development in a relatively small number of locations, perhaps to act as a catalyst for other development and/or to achieve economies of scale for the provision of higher order services, versus a larger number of smaller centres?

Stephen Alchin said planning and protecting infrastructure corridors will be vital. Whether we pursue decentralisation or not, we need to put more attention into protecting corridors for new infrastructure. As a nation, there are noticeable gaps in our approach to protecting corridors for new infrastructure and, where we make those investments, maximising the benefit we get from them. Corridors within our cities have not been reserved, and as a result, projects have to be placed in tunnels, or acquisitions of surface corridors become 'last minute', costly and politically challenging. Often, we invest in new road alignments without seriously examining opportunities to improve the alignment of our railways in a joint corridor.

We're not alone in facing these issues. A recent edition of *New Scientist* noted the demand for new energy corridors across Europe and the challenges this is posing for local communities, regional and national governments. Still, protecting corridors is not cheap. Justifying the investment requires good planning and long-term commitment. As a nation, we can dramatically improve the identification, protection and acquisition of corridors for new infrastructure. This is particularly relevant to areas around the edges of cities and rural areas, where we need to connect renewable energy sources to end markets. We also need to make greater use of shared corridors.

Climate Change Poses an Added Challenge. Surprisingly little rigorous work has been undertaken on the impacts of climate change on infrastructure networks. Much of the work that has been done is qualitative, or, where the work is quantitative, it only covers individual assets or sub-sets of assets in a particular area. This is at least partly because of the complexity of the issues, and the challenge of modelling impacts under a range of scenarios.

In a speech to the Business Council of Australia last October the Prime Minister said “..an agenda that does not supplant the essential roles of the States, Territories and local authorities, but which builds a new national partnership for better planning and productivity, and a better quality of city and suburban life...the time has now come for the Australian Government to take a much greater national responsibility for improving the long-term planning of our major cities.” He went on to say that in partnership with the States and Territories the Commonwealth proposes the development of national criteria for the future strategic planning of our major cities and will now consider linking all future infrastructure funding to compliance with these criteria.

Local government potentially has a two part advocacy role. It has traditionally been an active and passionate advocate ‘upwards’ for the views of local residents and businesses. However, in light of the challenges, the local government sector needs to consider whether and, if so, how, it can take on a second advocacy role. Can it be just as effective an advocate for the change in an area that is required to adjust to the broader, societal pressures? For example, how many of us – as individuals or as councils and governments – really reach out and raise these issues in the public domain and change our planning and investment decisions. Change is not easy. We have to find governance structures that build trust and maintain political support for change over the medium and long-term. That means we’ll need to find some ways of securing local benefits (infrastructure and services) that might be used to offset what many will see as the pain of change – change that local communities may see themselves bearing for the ‘greater good’. On the infrastructure front, different financial models are likely to be required. Developer contribution regimes alone are not being to be a sufficient means of securing funds for the new infrastructure.

Local Government will play a key role in brokering local land use changes, changes in local infrastructure and services and balancing the need to present local views to other Governments and contribute to explaining the need for change in the face of the challenges mentioned earlier. The sector will need to work collaboratively with State/Territory Governments and the Australian Government. It is interesting to contemplate what the ‘compact’ between government, the community and business will look like.

Dr Ian Joliffe

Principal Water Engineer, GHD

Ian Joliffe outlined the issues facing coastal communities in terms of infrastructure impact of sea level rise and other climate change impacts and emphasised that the time to plan and take effective action will be passed if we are not careful. The problems are anticipated in the longer term, but we need to start addressing them now. He said looking back over long time spans it was clear that there had always been changes in sea level and we know this change is occurring. He identified the types of coastal infrastructure that would be affected by climate change as water, power, telecommunications, transport, buildings and natural resources.

Considering water distribution systems, there are thousands of kilometres of coastline where water infrastructure is subject to inundation and there is a cost associated with this. Those costs are borne by both private individuals and the public sector. There is a long lead time involved in planning what to do about it.

He said wastewater systems are at particular risk of inundation from the effects of rising sea levels and increased rainfall. Many of the treatment plants are on low lying coastal areas and vulnerable to impact on treatment volumes and treatment efficiencies.

The impact of climate change on storm water infrastructure raised significant social issues with potential for greater flooding and more frequent surface flows, which will cause inconvenience and even personal trauma. Residents in vulnerable areas will want to have something done about it and the sooner this issue is addressed the better.

As far as power is concerned the power utilities know that they have a problem and they realize they have to identify where the risks are and what they can do about them. Reticulation in many areas will be affected and will have to be rerouted. The issue of continued access for maintenance will also need to be considered. A considerable number of substations and kiosks will be at risk and future replacement of these assets needs to be planned.

Ian Joliffe said gas pipelines were not considered a major issue. Many pipelines cross areas likely to be subject to inundation and many were underground. Oil pipelines were also not considered to have a high level of risk associated with them.

The implications for fixed telecommunication infrastructure needed to be carefully considered. Telecommunication companies are currently planning for the relocation of exchanges and towers in affected areas and are planning to provide for continued access for maintenance. There was less of a problem with mobile networks, but nevertheless towers may need to be relocated and made accessible for maintenance.

Transport infrastructure, including road, rail, tunnels and airports would be subject to inundation and reduced serviceability. Low level bridges were vulnerable to inundation and others may become 'islands' with lack of access. Marine infrastructure such as ports, piers, seawalls and jetties would also be impacted by inundation and reduced serviceability.

The biggest infrastructure risk was to buildings, including residential, commercial and industrial. This would be a significant issue to deal with because when people have an asset they expect to be able to capitalize on that asset. All buildings, including facilities such as hospitals, police and ambulance stations, will involve issues in relation to when to save or relocate, potential cost of damage and public facilities will be needed to act as evacuation centres. Addressing the issue of residential property would involve significant social issues.

Ian Joliffe said planners and decision-makers need to start seriously looking at how communities can better understand such issues and be prepared to cope with the risks associated with

climate change impacts. He said we need to question whether it was prudent to allow intensive development in potentially vulnerable areas. Existing developments may need to be relocated to higher ground. New developments needed to be planned to mitigate potential impacts and it may be necessary to change planning strategies in order to relocate coastal commercial centres.

He concluded by pointing out the complexity of the issues that will need to be considered. There was no doubt that infrastructure impacts and costs would be very significant and that planning to address these issues needs to start now.

Dr Nick Sciulli – Senior Lecturer Accounting, Victoria University

One major concern for coastal LGAs in relation to infrastructure and climate change is the potential cost involved in adapting to the impact of rising sea levels and more frequent and severe extreme weather events. This is an area of particular interest to Dr Nick Sciulli, senior lecturer in Accounting at Victoria University in Melbourne, who is planning a research project aimed at estimating the costs that are likely to be incurred by coastal LGAs councils in implementing adaptation measures.

Nick Sciulli told delegates his interest in the issue began after he had been reading some climate change literature. He realised that the focus, appropriately, was very much on the hard sciences but that there wasn't much literature available on the accounting implications of climate change adaptation. He outlined a number of cost implications for coastal councils, including the asset register, which picked up items such as:

- Budgeting for new capital requirements
- Management of the asset
- Depreciation of the asset (land is currently the only asset not subject to depreciation)
- Audit of assets
- Recording and reporting of assets i.e. The Balance Sheet
- Costing of planned assets.

Nick Sciulli said there a number of areas that were under-researched and that his survey of coastal councils had the potential to produce evidence that could be presented to Government in support of a case to gain the resources LGAs needed to carry out this work. He said the survey would help to identify liabilities on the balance sheet, contingent liabilities and assets, such as the cost of possible legal actions against councils, which was one of the matters referred to in the George report. Relevant recommendations in the George report included:

- **Recommendation 16:** The Australian Government ensure there is a comprehensive national assessment of coastal infrastructure vulnerability due to inundation from sea level rise and extreme sea level events.
- **Recommendation 23:** research required on the clarification of liability issues with regard to public authorities acting or not acting in terms of climate change adaptation and possible coastal hazards (eg legal basis to implement adaptation strategies of

protect, redesign, rebuild, elevate, relocate and retreat).

The two major research reports produced in late 2009 had identified a range of climate change and environmental risks to tangible assets in coastal areas, including:

- Animal disease
- Biodiversity loss
- Bushfires
- Coastal flooding
- Droughts and heatwaves
- Earthquake
- Extreme storms
- Inland flooding
- Land degradation
- Water scarcity

(Source: *Australia Report 2010. Risks and Opportunities*. Australian Davos Connection Report , Melbourne, 2010).

Nick Sciulli said he was seeking input from coastal councils as a step towards identifying the cost of climate change adaptation for LGAs. He said initial contact with a pilot survey which had been sent to several CEOs had indicated that the councils didn't have all the information required at this stage. For this reason he had developed a smaller survey as a prelude to conducting a more detailed survey at a later date. He said the challenge of dealing with the cost implications of climate change adaptation would require different council departments communicating effectively with each other. He invited delegates to fill out the survey form, which he estimated would take about 10 minutes.

SESSION 7: CONCURRENT WORKSHOP

Facilitated workshop - Development of a strategy to support the adoption of the recommendations of the Parliamentary Coastal Inquiry

This facilitated workshop was aimed at identifying the priority recommendations from the Coastal Inquiry report and to identify the steps that the Taskforce and other coastal stakeholders could take in support of the adoption of the recommendations. Participants in the workshop included members of the Coast and Climate Change Council, chairs and members of Regional Development Australia committees, elected representatives and officers of coastal councils from all states, researchers, and many others.

The Government had established an interdepartmental committee to consider the recommendations but had not to date delivered a response. The workshop discussed preparation of a communiqué to the two Ministers who referred the inquiry to the Standing Committee on Climate Change, Water, Environment and the Arts - Climate Change Minister Penny Wong and to Environment Minister Peter Garrett.

After discussion of the options available and an exchange of views on whether it would be preferable to seek the adoption of priority recommendations or to promote the adoption of all the recommendations in the report it was agreed that a communiqué would be prepared and that it would support the adoption and implementation of the full suite of recommendations from the report. A draft communiqué was subsequently prepared, with input from workshop participants and other conference delegates as follows:

Preamble

Representatives of 53 Australian coastal councils, which in turn represent approximately 4.95 million residents, together with other coastal stakeholders attending the Australian Coastal Councils Conference at Byron Bay on 2 and 3 March, 2010, considered the recommendations of the coastal inquiry conducted by the House of Representative Standing Committee on Climate Change, Water, Environment and the Arts. The inquiry report stated that ‘the time to act is now’. The delegates attending the conference subsequently issued the following communiqué in respect of the inquiry recommendations:

Communiqué - Recommendations of Parliamentary Coastal Inquiry

We call on the Rudd Government to act decisively by urgently responding to and implementing the recommendations of the inquiry, because Coastal councils and their communities are facing a complex and daunting range of social, economic and environmental challenges. For councils in coastal areas, for example, climate change is already a daily reality that requires them to make decisions that have significant implications in terms of risk management and future liability. They require guidance, clarity and consistency in making these decisions in order to ensure the future safety and sustainability of their communities. Apart from being at the forefront of efforts to adapt to the impact of climate change, coastal communities are struggling to cope with unprecedented population growth and development pressures. They are also leading the nation in facing the challenge of rapidly ageing populations.

We do not want the recommendations of this report to suffer a similar fate to the report of the inquiry into Sustainable Cities 2025 by the Parliamentary Standing Committee on Environment and Heritage, which was referred by the former Howard Government. This report has been left to sit on the shelf since being tabled in 2005.

We support the view expressed in the inquiry report that there is a need for national leadership in better managing the Australian coast, especially in the context of climate change. The recommendations of the inquiry present an historic opportunity for the Australian Government to ensure the sustainability of the nation’s coastal zone which is without doubt our most highly valued natural asset. The recommendations are carefully considered and feasible. They set out practical ways in which the nation’s coastal challenges can be addressed.

We endorse the inquiry report’s strongly stated view that ‘the time to act is now’. As a nation we have insufficient time to take effective action to adapt to the risks of climate change. As Senator Penny Wong, the Minister for Climate Change, Energy Efficiency and Water, stated at the launch of the Australian Government’s Position Paper on Adapting to Climate Change, ‘the opportunity to avoid climate change altogether has passed.’ Climate change represents the greatest threat currently facing Australia’s coastal communities. This risk is exacerbated by continuing rapid population growth and development.

Responding effectively to the risks confronting the Australian coastal zone requires a collaborative national approach with the participation and long-term commitment of all three tiers of government. It also requires effective community engagement and communication of the risks facing coastal settlements.

We call upon the Rudd Government, in the national interest, to adopt and implement the recommendations of the coastal inquiry without delay. Apart from addressing a clear and pressing need, the adoption of the recommendations would give effect to the commitment by the Government in its Caring for our Coasts Plan that it would provide national leadership on coastal management. Amongst other things, that leadership urgently needs to take the form of practical law reform and vital information dissemination. Such leadership will help address potentially dangerous inaction on climate change in some of our most vulnerable communities.

About the Report of the Coastal Inquiry

The report of the coastal inquiry by the House of Representative Standing Committee on Climate Change, Water, Environment and the Arts is titled *Managing our Coastal Zone in a Changing Climate: The Time to Act is Now*. It was presented to the House of Representatives on 26 October 2009.

The inquiry is one of the most comprehensive inquiries ever conducted by a Parliamentary Committee. During the course of the inquiry, which was conducted over a period of 18 months, the Committee received 107 written submissions, 21 supplementary submissions and 180 exhibits from individuals and organisations including coastal councils, professional bodies, coastal researchers, State Governments and government agencies. The Committee held 28 public hearings in Canberra, the Central Coast of NSW, Darwin, Adelaide, Hobart, Sydney, Perth, Brisbane, Melbourne and Broome during which it took evidence from 194 witnesses. Evidence was given under oath and was subject to Parliamentary privilege and examination by committee members. Members of the Committee also undertook nine site inspections to coastal areas vulnerable to climate change and environmental impacts.

After due consideration of the submissions and evidence gathered during public hearings the Committee drafted an inquiry report which made recommendations in respect of an integrated range of coastal issues, including:

- the science and impacts of climate change;
- adaptation strategies and practices to promote resilience to the impact of climate change in the coastal zone;
- key emerging issues, including planning and legal matters relating to the coastal zone;
- sustainable coastal communities and environmental impacts on the coastal zone; and
- governance arrangements and the coastal zone.

SESSION 8: Creating Sustainable Economic Options for Coastal Communities

Professor Edward J Blakely - Blakely Global

What most coastal communities are looking for is sustainable economic options, and identifying those options has been the focus of a recent research project conducted by a team at the University of Sydney, with funding support from the Australian Research Council.

The aim of the research project was to identify and clarify current economic directions in coastal communities and to use this information to help coastal LGAs develop tools to stimulate sustainable growth in their local economy

Professor Ed Blakely, the leader of the research team and principal of consultancy Blakely Global, told delegates the research was aimed at finding ways of using the resources that coastal communities had at their disposal – the human skills and the natural resources – to create business that were based locally but were connected to global markets. He said the research had been structured around a broad typology of the different types of sea change communities in coastal Australia, which consisted of five broad “ideal types”:

- Coastal Commuters - suburbanised satellite communities in peri metropolitan locations;
- Coastal Getaways - small to medium coastal settlements and groupings of settlements within three hour’s drive of a capital city;
- Coastal Cities - substantial urban conurbations (populations above 100,000 people) situated beyond the State capitals;
- Coastal Lifestyle Destinations - predominantly tourism and leisure communities, located more than three hours drive of a capital city; and,
- Coastal Hamlets - small, remote coastal communities often surrounded by protected natural areas, with populations below 15,000 people and situated more than three hours drive of a capital city.

The further communities were from the capital cities the more difficult it was to get a transfer of economic activity. The communities close to the cities were often little more than dormitory communities, where people lived but continued to commute to jobs in the city. Under these circumstances people invested little in the way of social capital in their community. They tended to shop and obtain other services in the city and just come home to sleep. They were residents in their communities but were not really part of it.

Professor Blakely said coastal economies were facing a variety of economic challenges. Economies in regional coastal areas were historically dependent on traditional industry sectors such as fishing, farming and forestry. In more recent years there had been a shift from traditional economic activities towards service oriented industries such as tourism and retail. Other factors affecting these economies were demographic changes, including aging populations, and the transient nature of the non-elderly population. Challenging issues facing these communities included infrastructure, housing, service and amenity to cater for socio-demo changes. There were also issues related to social equity and environmental sensitivity. The risk involved in these changes was that over a period of time coastal communities lost their unique character, both in terms of local environment and in their locally based businesses, including retail. These were the qualities that had attracted so many people to these communities in the first place. Instead, what was happening on a global scale, is that globally branded retail outlets and fast food stores were replacing ones that had a unique local character.

Economic development and promotional strategies needed to be developed on a regional basis. It was important to develop local branding, as in the case of Byron Bay, which had a brand that was recognized internationally. It was important to provide sources of funding for local business ventures and it was important to have a local workforce that had the skills to create globally relevant products and services, especially drawing on the potential of broadband internet connection. One strategy that could stimulate creation of local businesses was the idea of bringing people with skills together to create a business cluster. This was something that local councils could initiate. This would also assist home-based businesses and provide people with the opportunity for people to meet outside the home and network.

Changing demographics in coastal areas had the potential to contribute to the development of new locally-based businesses. Many of the people were nearing retirement age and perhaps

they had a house in the area that they had used for holiday accommodation for a number of years. When they moved permanently into the community they were looking for ways to continue using their skills. These people represent human resources that local economies can draw on. These were some of the factors that local communities could use to work out what competitive advantages they had: what were the factors and opportunities for changing and strengthening the local economy beyond tourism and services?

The research project was based on helping local councils identify how many jobs were being created in their local community and how much economic activity and revenue they were generating. Ed Blakely said the research was based on categorising local economies into four broad types:

- Established/mature LGAs which had aggregate real taxable income growing faster than national average but the resident population was growing more slowly than the national average
- Globally exposed LGAs which had aggregate real taxable income growing faster than national average and the resident population was growing faster than the national average
- Declining LGAs which had aggregate real taxable income growing more slowly than the national average and resident population was growing more slowly than the national average
- Transitional LGAs which had aggregate real taxable income growing more slowly than the national average and resident population was growing faster than the national average

He said the big thing you need to consider is what sort of people do you have in the 16 to 64 year age group with skills that can be used as the basis for developing new businesses. This may mean devising strategies to attract younger people into your community. The economic category that was best to be in was the globally exposed community which was attracting skilled people who were not highly dependent on community services.

He said locally-based businesses that were owned and operated locally were preferable to global franchise operators which export their profits to the capital cities or to their head offices overseas. Revenue from these operations did not 'stick' locally. He said there were a large number of older people who come into coastal communities who want to open a restaurant or retail outlet and used their superannuation savings to keep it going. Coastal councils needed to encourage and support these people. He said that people who are making locally-produced products and exporting generated local economic activity and jobs. This should be the goal of local councils – to stimulate development of high quality products which have potential for global markets. This was a good formula because it stimulated local employment and utilisation of local resources.

It was important to realise what attracts people to coastal areas is lifestyle. This was the thing that attracted people with knowledge and skills. The natural environment was therefore important. It provided communities with the skills and capacity to start new businesses. Most of

the skilled and highly educated people who move into coastal areas want to do this in any case. One of the things they need is good broadband connection to link them with national and global markets. It was also important to provide services that would enable them to maintain links with the places they came from. One of the strategies local councils could employ to stimulate business opportunities for these people is to build incubator communities where people who want to develop and make things can come together and work collaboratively. The sort of businesses that represented opportunities for skilled people moving into coastal communities include health, tourism, education and retail operations.

What we are striving for is creative liability. Locally-based funding sources were also important to assist people in start-up ventures that had the potential to achieve global reach. Without adequate funding it would be much more difficult for people to get started. Angel funding sources at a local level could make all the difference in creating tomorrow's industries at a local level today.

Deb Cox

Deb Cox is the creative mind behind the development and writing of the *Sea Change* series, which first went to air on ABC-TV back in 1998. More recently she was the writer and co-producer for the television series *East of Everything*, which was set in Broken Bay, a town remarkably similar in many ways to Byron Bay. This is not so surprising perhaps when you realise that Deb Cox and her *East of Everything* co-producer Fiona Egger now live in the local community which no doubt provides them with a rich source of material for future episodes. The following is a transcript of the presentation by Deb Cox to delegates.

Obviously our focus is on the creative industries but the wonderful thing about most creative industries – and ours in particular – is that they can embrace so many other parts of the local community. No personal development movement, or backpacker resort or wealthy entrepreneur is beyond our reach – hippies, property developers, yoga gurus - and even members of local council - are what we draw on to reflect the community back to itself – of course thinly disguised enough to avoid too much trouble and - in the case of *Sea Change* or *East of Everything* - exaggerated for the sake of humour. As Alan suggests – there are so many stories to tell in a community like this one. But I haven't always had the privilege of being able to tell them.

Sea Change wasn't originated in a Coastal community - but in my home office in inner city Melbourne many years ago. I'd already made the decision to move to Byron Bay – for one year – to have a break from the screen industry – to write a book or poetry or something equally as indulgent for me at that point – with two young children and a husband who has always had an admirable work/leisure balance. I hadn't had a mid-life crisis like the central character of the series – Laura Gibson – and I didn't intend to have one. I described my own *Sea Change* as 'preventative'.

On the eve of our departure though, the ABC committed to the series and my only option was to commute when I needed to from Byron Bay to Melbourne – and to write long distance - which was in retrospect incredibly optimistic – when you consider that the internet was less than a decade old and the only person who could actually open my emailed scripts at the ABC Drama Department in Ripponlea was the accountant.

I tried so hard to drag the series to the region with me. I got as far as luring the ABC Head of Drama up here for a very picturesque few days tooting around in a mini-bus with prospective directors and designers – wondering if Brunswick Heads or Billinudgel or Byron Bay itself could provide the basis for Pearl Bay. I think we all knew it was a pipe dream, though, because that Accountant with the internet had crunched the figures and the cost – compared to a shoot in Melbourne – would have been ridiculous. In 1997 this region simply didn't have the infrastructure – the available cast and crew was minimal and relocating and accommodating the majority of our production would have blown the budget – and it's easy to blow an ABC drama budget without those extra challenges.

Like so many other creative industry professionals at that time, my merry-go-round of commuting to the city for work whilst trying to raise my children and keep my family together in an 'idyllic coastal town' – brought gains and losses. The benefits of living in a smaller community manifested as realities – instead of quaint peculiarities I could write humorously about. I loved the fact that I could do yoga with my kid's teacher - whose husband coincidentally fixed our car - and whose child was also my daughter's best friend and whose sister had a script I just had to read! Where else but Ballina Airport – as it was then - could you be farewelled at the boarding gate by the same bloke who checked in your luggage with "Have a nice trip, Deb"! But the constant travel and the sense of dislocation took its toll. With one foot in a heavily caffeinated city and the other at the beach – I was becoming Laura Gibson – pre *Sea Change* and with less ability to laugh about it!

Much more frustrating, though, was the difficulty of contributing to my own community. I had skills to pass on and I felt the responsibility of that – particularly in a region where there wasn't the same access to education and employment opportunities for emerging or aspiring screen practitioners. And I felt hamstrung because I knew there were more relevant stories I could be telling – or helping others to tell - about my own environment.

I knew there were other experienced professionals connected with the screen industry all around me, though – animators, documentary makers, people involved in 'new media' as it was called then, sound engineers, film editors, lighting specialists, talented musicians, costume designers, art directors – many of them on the same merry-go-round of commuting elsewhere for their livelihood. It's not surprising creative people are drawn to coastal communities – apart from the obvious lifestyle attractions. Creativity is about ideas – whether it's art, music, film, dance, photography or poetry – and ideas need headspace and the romantic notion – whether it works or not – is that moving away from the buzz of busier places – whether it's a seachange, treechange or move into the outback - will somehow be conducive to elevated thought and practice. The greater challenge is how to embed yourself in a new community once you've escaped the rat-race.

I knew producing a series here was a surefire way to embed me – and hook up a whole lot of other creative individuals looking to contribute in the same way – and my strategy was sheer doggedness - as in hounding as many useful people as I could – like my fellow directors on Screenworks – a newly formed umbrella organization back then – like any prospective crew member I met anywhere near the shire, and like fellow screenwriter Roger Monk – and like our Mayor, Jan Barham, about how we should film a series up here. The most important person to harass, though, was Fiona Eagger – experienced television drama producer – because we didn't

have one of those and I had to get her to move house with two kids and her cinematographer partner (who was an added bonus!). Fiona's achilles heel was that she grew up in a rural community in Victoria and was hopefully feeling nostalgic enough about small town life to swallow the significant production challenges and come along for the ride.

After a whole lot of wrangling and support – which Fiona will tell you about – the plan worked and we filmed thirteen hours of prime time drama over two years in the Northern Rivers – and we like to think we made a significant contribution to a budding industry which has the potential to address almost any issue a community cares about.

East of Everything – like *Sea Change* - looked at life in a coastal town in a tongue-in-cheek way – but the humour wrapped around more serious considerations - like the importance of family, the legacy of the hippy dream and finding your home in a global sense.

Fiona and I are now developing other projects – one of them a youth drama – mentoring the younger generation to voice their own views on life in a region where tourism offers job opportunities but also threatens their patch in ways that can easily become problematic and destructive. Of course there are other ways to address the alienation of regional youth – like finding meaningful employment or involvement in sporting activities – but performance is a way to tell difficult stories that engage the rest of the community as well - in a way that promotes understanding – whatever the issue.

Everyone in the television audience felt sorry for Bob Jelly when he took to the couch in his underpants - no matter how many dodgy auctions he ran or how many people he'd conned to win Shire President. Stories told through documentary, the visual arts, songs or dance have the same potential to cut to the chase when it comes to experiencing the world in someone else's shoes or emotionally or intellectually engaging with major issues – like climate change, or ageing, or drug abuse, or sexual assault or road trauma. Even if stories fail to offer a solution or some kind of hope – they draw the audiences that share them into a common experience – and that's a damn good start towards greater tolerance and some kind of consensus.

The tricky thing – for all of us – is how to keep up the momentum and sustain ourselves - when creative projects are so hard to fund and take so long to develop. One key is better technology – being able to send larger video files and stay wirelessly connected wherever we go – to expand our businesses but remain locally based. Another strategy is to network across the creative spectrum where we find common ground. For example our new company, Every Cloud is developing a series of youth performance workshops with Norpa theatre organization based in Lismore – because we're both interested in the road trauma and other big issues for regional youth. We're hoping to develop a drama featuring a graphic online novel with a regional arts leader because it's a great way to feature local art. We're even developing a musical which takes advantage of both our connection with Norpa and the obvious musical talent in this region.

There are many survival strategies but they all require support. I've been wonderfully supported by the wider creative community over the last thirteen years or I wouldn't still be here – and Fiona is going to talk more about the way we were both supported – particularly by Council - to make *East of Everything* happen – and the economic benefits and career opportunities offered by a local screen industry.

Fiona Eagger

Deb and I work in the screen and digital content industry on the face of it this wouldn't seem to be a sustainable economic option for most coastal communities. Though the lessons learnt from making East of Everything can translate into how to attract and support a sustainable creative industry in your own area.

Question, What was important to us when choosing to film a TV drama series in a regional area? As Deb has mentioned, she is a local storey teller wanting to tell stories in and about her community. This was the primary impulse to film in this area. But as filming regionally added about \$500,000 to the budget we had a lot of convincing to do. We also had to convince our investors that we could actually pull off filming a TV series in a regional area.

What assisted us in our argument was the existence of local statistics supporting our claim that there was a high number of screen practitioners that lived in the area, so we had a skilled work force to draw on. There was also a recognized local screen organization in Screenworks that could provide a infrastructure to us to access this identified community.

A local film maker and academic, Cathy Henkel had done a PhD on the importance of Screen and creative industries in regional areas – so we could access that data. We had local support from the mayor Jan Barham – so we felt we had an advocate in the community. And finally the Byron Bay council came on board to waive the council location fees.

It was important for us in our decision making to know what we were bringing to this community was valued. The argument had to go beyond the sheer dollars and cents, as it didn't add up on that basis and we needed to know if was worth going into battle for with our investors. We needed to know that the community, presented by the council, wanted to support local storey tellers that they wanted the local jobs created, that there was a value to giving local youth access to popular culture and providing creative role models.

The financial benefit of this support was important but not actually as important as the vote of confidence. As I said our decision was not made on dollars and cents alone, although in saying that we did bring dollars and cents into the community. There was a 4.3 million dollar direct spend in the area, 660 locals were employed and 270 local business supported. We interacted with the local schools and provided educational opportunities for their students. And we haven't gone away, we have formed a new production company based in the region, we are mentoring many emerging producers in the area, we are creating job opportunities, forming creative partnerships with local youth and theatre organizations – we keep putting back into the local creative industry.

What is important for you to do? It is important to have your council agree that having a sustainable creative industry is important to the health of your community and one that has to be supported. Then it's important to work out what is the focus of the creative community is in your area. There may already be a natural focus happening, such as:

- visual arts and design
- Writing and publishing,

- screen and digital content,
- music and performing arts or cultural festivals,
- arts education.

Councils have an important role to resource cultural and creative industries development. This can be done through policy, staffing and programming such as direct subsidy, strategic planning, creating art and cultural facilities, offering council resources, waiving fees, lobbying state govt .

On a state level the payroll tax exemption for this area was important but one we found out for ourselves, by accident, rather late in the piece. If you have incentives for business in your area make sure they know about it or use it for attracting businesses that fit your strategic plan.

When I was on the board of Screen Tasmania, when it was just forming there was a lot of strategic planning about what the focus of Screen Tasmania's limited funding and resources should be. There was an acknowledgment that Tasmania had to create a niche for its self rather than compete with Victoria and NSW. That particular strategy was to actively support and attract a small number of production houses that focused on elearning and animation. They don't need huge infrastructure, something that is easily transportable, ideas are cheap,

The state Government was proactive in trying to attract companies, offering incentives and support – this paid off. Tasmania has a very strong animation company called Blue Rocket, their last series resulted in \$5 million spend in the Tasmanian economy and provided jobs. Their success will attract other like companies as there is now a tested skilled workforce in the area. Just as *East of Everything* has paved the way for *Dirt Girl* (ABC3 kids series) or the feature film *Lou* to come and film in this region. All its takes is leadership and vision – which I now know from my experiences with Byron council, councils can achieve! You can make a difference.

Pam Brook

Twenty years ago Pam Brook and her husband Martin came to Byron Bay on a holiday. It was a trip that changed their lives and the lives of a number of many local people. Like many people who come to a coastal town for a holiday their thoughts turned to one day moving into the area permanently. They subsequently bought 98 acres of land fairly close to town then wondered what they were going to do with it. It was about ten years before they made the move permanently and started what has since become a very successful family-run food manufacturing company. They are the classic sea changers – in fact the sort of sea changers that every coastal community would like to attract. Pam Brook told conference delegates their story as follows:

In 1989 Martin & I bought a rundown dairy farm covered with weeds and lantana and started a macadamia farm. When we moved here in January 1999 we came to fulfil a dream and start our own manufacturing business. We decided to start a value adding business- after the frustration of seeing macadamias treated as a commodity- exported overseas for others to do clever things with. Today our farm has 4000 macadamia trees and over 30,000 rainforest & eucalypt trees. We still plant more than 1000 rainforest trees a year and today our farm is a haven for native birds and wildlife.

Brookfarm employs about 30 staff. We supply to Independent retailers, restaurants & hotels throughout Australia and also export to the USA, Germany, UK, NZ. We supply three Australian

Domestic & International airlines, who take us throughout the world. We make all our products in our factory on the Byron Industrial Estate - we make 15 tonnes of muesli a week, plus Walkabout Mix, Muesli bars and roasted macadamia nuts.

Why did our sea change work? For us it was about sound business planning and determination, plus the flexibility to deal with all the surprises that being an on-farm rural business presented to us. Martin drives the Sales & Marketing, and I look after the Planning and Development and we have gathered a great team of talented people around us. Byron Shire as a diverse tourism destination and a long standing centre for agriculture was a great advantage for us. Council support for regional markets & farmers markets encourages regional food businesses– we started at the Bangalow Markets. Our first factory was built on our farm.

Our seachange was for agribusiness but the city seachanger often brings many problems to regional coastal councils that are in conflict with both agriculture & agribusiness. On farm development is a key challenge facing regional councils for both tourism and value adding. Many city seachangers come for peace & tranquillity, green rolling hills and still air only disturbed by occasional birdsong. Working farms are not like that. Agricultural land in rural Australia is an Industry.

- Nextdoor to us cows are separated from their calves twice weekly – we have adapted – it's our neighbor's livelihood
- Dairy cows are moved daily down the road between paddocks - a dying art in some areas
- Tractors start working crops in summer at 5am
- Farmers spray their crops in compliance with a multitude of rules & regulations - even organic farmers spray their crops in subtropical regions.
- Today it's getting tougher and tougher for farmers to farm.

The key challenge is residential coexistence with agriculture and support for growth and development of agribusiness on prime agricultural land in coastal regions. The pressure for residential development is a cash cow but development of sustainable agribusiness is slower progress - once the land is gone or so over encroached on by residential that agribusiness cannot function then the land is gone forever.

If we hadn't started on our farm we wouldn't be here today. Farmers need flexibility from Councils to encourage value added agribusinesses to start up on farm. Encouragement of sustainable on-farm agribusiness and agritourism will allow farms to remain or become viable and means we retain vital agricultural land, which is what makes coastal communities like ours so special.

Council needs to communicate more with buyers of agricultural land about what is special about their region. Perhaps a communication package to new buyers of Agricultural land alerting them to:

- Landcare groups
- Regional Industry bodies
- Importance of agriculture as an industry in our Shire

What can councils do to support local businesses?

- Employees - Great workers are often locals not seachangers and we need to keep them here. We need to provide a balance of affordable accommodation not too far from where the jobs are.
- Transport - It's all reliant on cars & trucks. There is no public transport (bus or rail) reliable for workers from a distance. Our business emphasises shared travel and rewards it but it is difficult. There is great opportunity for business and local council to look at more structured car pooling or transport
- Sustainable on farm development - Facilitate on farm agribusiness whether tourism or value adding and the retention of agricultural land.

Finally some tips for Seachangers.

- Living in this environment is a two way street - you can enjoy it but you have to give back to keep it like that
- Learn to slow down and adapt – some things just don't happen fast here.
- The support that comes from your community is a huge asset – you can experiment here because it is small scale and people are more understanding.
- There is no anonymity in rural communities - everyone knows someone who you are talking to.
- You have to negotiate and listen because you need your neighbours and your community.
- Brookfarm would not have succeeded without the support of our local community.

SESSION 9: Coastal Populations

This session focused on the issue of an ageing Australia and what it means for the future of Australian society and in particular for coastal communities.

The Hon Justine Elliot MP Minister for Ageing and Member for Richmond

Minister Elliot told delegates that in September last year, the Treasurer, Wayne Swan, launched the Australian Institute for Population Ageing Research in Sydney. In his speech he identified two great challenges to our economy. One was the ageing of our population and the other was climate change.

She said that last month, with the release of the third Intergenerational Report, we were reminded of these challenges. The Intergenerational Report is powerful in that it brings together discussion and projections of all of the pressure points on the economy, living standards and government finances into one document. While the impact of inaction will be felt decades into the future, it is important that we act in the near term to address them. She said that decisions taken over the next four years will impact on the wellbeing, lifestyles and standard of living over the next 40 years and that as a group, delegates represented communities that will be amongst the first to meet some of these challenges.

As Minister for Ageing and the Member for Richmond she said she understood that the proportion of older Australians is growing and many of these older Australians have already moved to or plan to move to coastal areas. This will mean that the demand for the services needed by an ageing population in coastal regions will increase. Add to this the potential for climate change to affect homes on Australia's coasts and the links between these two challenges becomes obvious.

Minister Elliot said she would like to reflect on how the ageing of our population will affect the communities you represent and the ways in which the Rudd Government intends to meet this challenge.

She said that Australians now have one of the longest life expectancy of any English speaking nation. Between 1989 and 2009, the proportion of the population aged 65 years and over increased from 11 to 13.3 per cent. The life expectancy of Australians and the ageing of the population is a testament to our own successes in innovations in medical and diagnostic technologies and improvements in diet and lifestyle. While attention is often given to how much longer baby boomers and generations X and Y will live, the fastest growing group is people over 100 years of age and that over the past two decades, the number of centenarians increased by 206%, compared with a total population growth of 30.1% over the same period. In the 12 months to 30 June 2009, the number of people aged 100 years and over increased by almost 20% to reach 3,700. They are predicted to increase from 3,700 people today to around 70,000 people by 2055.

Minister Elliot said the fact that we are living longer and healthier lives was fantastic but ageing has implications for all parts of society. It has implications for the design of housing, for the accessibility of communities, for the needs of infrastructure and of course, for the health system. Health is a classic example of the both demographic and non-demographic pressures. An older and growing population is likely to demand more and better health care services. Over the next 50 years, real health spending for those aged over 65 years is expected to increase seven-fold. An ageing and growing population will account for about 40 per cent of this increase, She said it was also more likely that people will spend longer periods in residential aged care. In 2007-08 the average length of time people spent in residential aged care increased to almost 148 weeks from 131 weeks a decade ago. It is estimated that almost four out of five Australians will have at least one long term or chronic health condition. Chronic conditions or multiple chronic conditions will indeed lead to increased demand for care and support services, with projections that there will be a 160 per cent increase in the number of older people needing care by 2031. Over the same period, the number of informal primary carers will increase by less than 60 per cent – mostly due to population ageing itself. This will no doubt lead to greater reliance on residential aged care and community care services, and at the same time, the number of working age people for every person aged 65 and over will fall from its current level of 5 to around 2.7 in 2050.

Minster Elliot said this will present our workforce with a particular set of economic and social challenges. Put simply, there will be fewer taxpayers to fund support and care for older people, because the proportion of the population traditionally considered being of 'working age' will have shrunk. And inevitably this will impact on government expenditure. Australia is not alone in facing the challenges of an ageing population. Countries like Canada, the United States, Ireland, Italy, the United Kingdom and India are facing similar demographic changes. India – for the first

time – in its 2008 budget the Government announced a policy to meet the challenges of its ageing population. It is not something that any nation has faced in human history so it will be a time that the innovation and creativity of the past that has allowed us to increase our longevity is used to address the impact of ageing.

She said the Rudd Government was committed to a dual track approach, one which delivers more services for today while laying the foundations of reform for the future. Also in recognition of the impact population ageing will have on local communities, one of her first actions as Minister for Ageing was to establish the Ministerial Conference on Ageing. The Australian Local Government Association was included as a representative on the Conference to ensure that a collaborative approach is taken when it comes to an ageing population.

She said that today more services are being provided to more older Australians than ever before and over the past two years more than 10,000 aged care places have become operational with some 900,000 older Australians receive some form of aged care last year which included respite, permanent residential care, community care and domestic assistance. Last financial year more than 250,000 people received residential aged care, more than 64,000 older Australians received a community care package, and nearly 12,400 people received transition care. At the same time more than 860,000 received services through the joint Australian, state and territory government Home and Community Care program.

Minister Elliot said the challenge is to continue to provide these services and programs in a way that is both sustainable, able to meet the needs of an ageing population with increasingly complex requirements and provide choice in care options. Therefore she said we require more services and greater choice of the type of care on offer and that is why under the Rudd Government, funding to aged care has increased by nearly 20 per cent, which is more funding for more services. This financial year (2009-10), \$10 billion will support the aged care needs of our older Australians – that is 10 per cent more than in than the previous year.

She said the reform of the health system is probably the largest initiative that we need to undertake to support regional coastal communities and their ageing populations and people aged over 65 place a demand on the health system. She said this is not a criticism but merely a fact of life – as we age we tend to use more health services and so we need to introduce policies that deal with the reality that we will face over the coming decades, not shy away from it hoping that it will go away or that someone else will deal with it.

Minister Elliot said the Government was also pursuing initiatives to encourage social inclusion, to encourage workforce participation for those who wish to continue working and to encourage healthy, active ageing. We understand that respect and inclusion are important components of a good quality of life. For example we have undertaken to create a housing market responsive to the needs of older people by increasing the supply of affordable, adaptable and universal design social housing; upgrading existing social housing; increasing accommodation and support services for older homeless people; and increasing the supply of affordable, accessible rental housing. The Government has also committed \$15 million over the period 2008-2011 to provide free access to computers, broadband services and training to seniors. Broadband for Seniors will establish up to 2,000 free internet kiosks over the next three years in community centres and clubs used by seniors. This will help better connect our older Australians particularly those in regional and rural areas.

She said the Government has also launched a \$43 million Productive Ageing Package, which is aimed to provide vital training and support for older Australians who want to stay in the workforce and builds on our investment of more than \$135 million to train more than 21,600 aged care workers as we will need a highly qualified and skilled workforce to be able to deliver services to our growing ageing population.

In conclusion, she said the trend for people to migrate to coastal regions in retirement is likely to continue as coastal communities are great places to live and they offer many of the things people consider to be quintessentially Australian and a quality of life that more closely matches the perceptions of people's views of retirement living. She said that we all understand this brings with it challenges and opportunities and these are challenges that we will work together to tackle and they are opportunities that everyone in our communities will benefit from.

Andrew Howe

Senior Demographer, Australian Bureau of Statistics

Andrew Howe told delegates his job at the Australian Bureau of Statistics is to estimate all regional populations across the country. To provide some context to the presentation he provided a brief rundown on how we prepare these official population estimates. Our base data is the five yearly population Census, and a point I want to make early is that these counts we get from the census are NOT official population estimates. These census counts are turned into population estimates by taking into account what we think the census might have missed, adding in Australian residents who were overseas on census night and accounting for the time between census night (early august) and the traditional reference date of 30 June. So the census gives us our base for measuring the size and composition of the population.

To update from our five-yearly census base, we need to account for the three 'factors' of population change:

- births, which are added to the population
- deaths, which are of course subtracted
- migration, which in net terms, is added or subtracted.

Updating our population base for these components of population change provides us with a new population base, which we can update further over time. Preparing population estimates uses real, or observed, births, deaths and migration data from the past. However, by making assumptions about future levels of births, deaths and migration, we can use the same equation to get an insight into the size and structure of the population in the future.

An important point I would like to make about presenting these population projections, as we call them, is that this is not me, or the ABS saying "this is what the population will be in the future." Rather, what we are saying is: "this is what it will be if assumed levels of fertility, mortality and migration apply."

Over the past 40 years, and especially in recent times, Australia has experienced some major and interesting transitions in these components of population change, resulting in the population of the country almost doubling since 1970. A recent upswing in the fertility rate, combined with some record high number of net overseas migration, have resulted in some

historically large increases in the total population over the past couple of years, as shown in this abs demographic data.

By applying recent trends in births, deaths and migration over the next 40 years, the Commonwealth treasury recently released a set of projections which has Australia's population increasing to around 36 million by 2050. Absorbing an extra 14 million people over the next 40 years provides Australians with some major challenges, especially in terms of the infrastructure and service requirements to handle these extra people - a population equivalent to current-day NSW, Victoria and South Australia combined. However, while the third Intergenerational Report released recently by Treasury has put Australia's future population levels in the spotlight, it does not provide an indication of where within Australia these extra 14 million people will live. So, can we get a regional indication of how Australia's population has, and will continue to change? Our census-based data is available on a regional basis, while we also have good regional indicators of population change - reflecting births, deaths and migration. This data provides us with good-quality estimates of regional population size, as produced by the ABS. By applying regional variations to the fertility, mortality and migration assumptions mentioned earlier, we can produce regional population projections, giving us insight into the regional distribution of Australia's future population.

Recently the Commonwealth Department of Health and Ageing released a set of regional population projections going out to the year 2027. What these regional population estimates and projections show is that there has been - and, if recent regional trends in fertility, mortality and migration persist - there will continue to be a higher concentration of people living in Australia's seachange regions.

Andrew Howe showed delegates a slide presentation illustrating how the share of population between sea change and non-seachange areas share has changed over the past 18 years and how the sea change share is projected to further increase in the future. He then showed a presentation based on Google Earth which illustrated how the population in particular sea change LGAs had changed over the past 20 years and would continue to change over the period up to 2027. He told delegates the projected population in Australia by 2050, as indicated in the most recent Intergenerational Report, will be 36 million. This represents an annual increase over the next 40 years of 1.2%.

He then outlined the effect the ageing of the population would have in the structure of the Australian population over the next 40 years. The ageing of the population by 2050 was projected to result in the population aged over 65 being tripled and the population over the age of 85 being quadrupled.

Andrew Howe said these figures were based on updating base population data for each age cohort of males and females separately. He then indicated the Department of Health and Ageing had prepared regional projections which indicated that by 2027 the proportion of people aged over 65 in sea change areas would double compared to the current levels and that the proportion of people aged over 85 would increase even further.

He then showed delegates a presentation based on Google Earth which illustrated how the population of people aged over 65 and 85 in selected sea change areas had increased over the past 20 years and would continue to increase over the period up to 2027.

Cr Patricia Chigwidden - Deputy Mayor, City of Victor Harbor (SA)

The City of Victor Harbor, in South Australia, is the LGA with the highest median age of any Australian local government area. She provided an outline of the key component of Council's planning for an ageing population. Cr. Chigwidden told delegates the rapid ageing of the City of Victor Harbor's population has encouraged the Council to be pro-active in responding to the considerable challenges and opportunities that this provides. Hopefully some of our experiences, and the approach that we have taken, will be of interest to some Councils.

She said Victor Harbor is approximately 1.5 hours south of Adelaide and had a population of around 13,000 people. It is one of the fastest growing councils in South Australia with 3% average annual growth. More than 32% of the current population is aged over 65. If current growth trends continue, by 2022 we would expect to have more than 40% of our population aged more than 65. There is a net outward migration of people aged between 15 and 29. The number of young people aged between 15 and 29 has hardly changed in the last 20 years, even though the city has been growing at around 3% per year. The average family income is 24% below state average and the number of people receiving the pension is 47% above state average. There is a high incidence of disability with associated needs: e.g. 60-64 yrs is 40%, 85+ yrs is 80%.

What this means is that Victor Harbor has an unsustainable population structure with more aged households, higher dependence on health and community services, more frugal spending habits and fewer people of working age to provide health and aged services. The implications of this will be significant in terms of what services and infrastructure will be needed, footpaths, access to shops and services, car parking and so on.

So, what is Victor Harbor's approach to meeting the needs of an ageing population? The key strategic document to guide its response to an ageing population is its Urban Growth Management Strategy (UGMS). This is based on extensive research Council has undertaken in order to more fully understand our local community, what its needs are, and what is likely to be the most effective responses. It involves cross departmental and inter-disciplinary planning and policy development, more effective and efficient governance, an integrated approach to strategic management, long term land use planning, and informing other levels of government on infrastructure planning, funding, and the delivery of programs.

It is important to note that we are not planning to just respond to the needs of an ageing population by ensuring provision of infrastructure and services (although we are doing this), but we are also aiming to change the projected population profile by actively encouraging younger people to live and work in the area. So, everything we do to attract and retain young people is in part a response to the ageing of our community. It includes things like affordable housing, employment opportunities, improved post secondary education opportunities, maintaining the natural environment, and maintaining the relaxed rural lifestyle and strong sense of community, that we know people value highly.

There are 3 key objectives in the UGMS:

- Objective 1 is to encourage a diversity of population while targeting younger people to live & work in the area. Strategy areas include: Employment and economic development, Population and housing and Connectivity.

- Objective 2 is to achieve the sustainable provision of physical infrastructure and community services. Strategy areas include: Physical infrastructure, Urban planning and Community.
- Objective 3 is to balance the pressures of a high level of growth by safeguarding the environment, lifestyle and prosperity. Strategy areas include: Environment and Community.
- The UGMS can be accessed on Council's website - www.victor.sa.gov.au

SESSION 10: Coastal Housing Options

David Cant Chief Executive Officer, Brisbane Housing Company

Most regional coastal communities report a shortage of affordable housing options for socially disadvantaged households such as people with lower than average incomes, single parent families and pensioners. Demand for new housing and holiday accommodation often reduces affordable housing opportunities. In this session the conference considered an innovative scheme for providing low-cost housing options in the Brisbane metropolitan area.

The Brisbane Housing Company is an independent, not-for-profit organisation which provides affordable housing in Brisbane. The company was established eight years ago and provides a portfolio of housing for people on low incomes, including a mix of boarding houses, studio units and 1, 2, 3 and 4 bedroom apartments and townhouses. The housing is offered at below-market rents to households on low incomes. David Cant is the CEO of the Brisbane Housing Company (BHC) and he told delegates how the company operates and what it is setting out to achieve.

David Cant said he believed the answer to the problem of a shortage of affordable rental housing is the not for profit sector. The area of most acute shortage of low cost housing is in coastal communities, and he believed there was real relevance in what the BHC was doing to these communities. He described the BHC as an organisation that exists to provide affordable rental housing solutions for those on low incomes. It is a public company limited by shares and an independent charity that was incorporated in 2002 and now has over 700 homes rented to those in need. The enterprise is the result of an innovative joint venture between State Government and Brisbane City with participation of community shareholders drawn from the commercial and community sectors. Brisbane City Council had played a critical role in initiating the venture.

He showed illustrations of projects completed by the BHC, including a development of 42 units at Kelvin Grove made up of 12 boarding house units, 18 studio apartments, 10 one bedroom units and two bedroom units. The development has some commercial space at ground floor level. He explained that the BHC can do some things that the private sector cannot do. For example, some of the studio apartments had areas of only 26 square metres, which is much smaller than a private developer could provide because a minimum 50 square metres was required for mortgage insurance. There was demand for smaller units such as this which were priced at levels that people on low incomes could afford. This sort of development was not economically viable for a private developer because it did not generate a commercial level of return.

David Cant said three quarters of the tenants in BHC developments were either partially or totally dependent on social security and about a third were in either part time or full time work. The tenants were sourced from the public housing waiting list. In order to qualify for public housing people needed to receive no more than \$550 a week, although this still leaves a large gap in the market. The aim of BHC was to make housing available for no more than 30% of a person's income. The rents are acknowledged as good value for money. There was a high level of customer satisfaction with the location of the homes and the services provided. He said there was sometimes initial reluctance on the part of people living in the neighbourhood to have a development in their local area, but BHC can usually overcome peoples' fears by showing them completed developments and reassuring them that the BHC development will not lead to a devaluation of neighbouring properties. Both BHC and their tenants see the housing provided as long-term housing. There is evidence that low income households tend to raise their expectations when they move from boarding rooms to larger living units. For example, more than 30% of BHC tenants have said that they have entered paid employment since moving from boarding rooms to larger units.

He outlined the merits of the model, including the ability of the BHC as a public company structure to harness the resources of organisations and individuals who could serve as shareholders and directors. Coastal communities, he said, have an abundance of people with extensive life skills who would be willing to service in this sort of capacity. The commercial approach of the organisation and its operational focus helps to get results. The not for profit model locks in assets for long term community benefit. The shareholding of State and council is a source of strength.

David Cant said he believed that coastal communities were at the epicentre of the housing affordability crisis. The factors contributing to this included high costs, lack of available land for development, and reluctance of the banks to make available finance for residential development. BHC was not facing difficulties in these areas and was backed by extensive income-producing assets.

One advantage of the model was that the Commonwealth Government strongly supported the growth of not for profit providers for the reasons Queensland originally endorsed the creation of BHC. Commonwealth investment is intended to facilitate private investment and growth of the independent sector and Commonwealth funding programs may increasingly be drawn to those states and localities where local independent social housing providers can facilitate take up of grants by delivering suitable projects.

He said councils were in a good position to utilise assets such as council land and other places where accommodation could be developed which were not available to the private sector. He invited delegates to visit the Brisbane Housing Company web site and to make contact if they were seeking additional information on how the model worked. The BHC web site is at – www.brisbanehousingcompany.com.au

SESSION 11: CONCURRENT WORKSHOP

Australian Coastal Alliance Inaugural General Meeting

Byron Community Centre, 69 Jonson Street, Byron Bay

Tuesday 2 March 2010. Commencing at 13:40

In attendance:

Interim Steering Committee:

Bill de la Mare	CSIRO
Dorean Erhart	LGAQ
Neil Lazarow	Australian Coastal Society
Tim Smith	University of the Sunshine Coast
Alan Stokes	National Sea Change Taskforce Inc

Attendees:

Nick Abel	CSIRO
Jan Barham	Byron Shire Council
Ron Barnes	Statewide Mutual
Stephanie Ballango	JBA Urban Planning
Iris Bohnet	CSIRO
Matt Boland	Victorian Coastal Council
David Broyd	Port Stephens Council
Fiona Buchan	Kingborough Council
Warren Bunker	Sunshine Coast Regional Council
John Church	CSIRO
Ian Cohen MLC	NSW Parliament
Mike Colreavy	Bellingen Shire Council
Mark Davies	Surf Coast Shire Council
Jon Doole	Kingborough Council
Dale Fallon	Southern Cross University
Norm Farmer	Surf Life Saving Australia
Susan Faulkner	National Sea Change Taskforce Inc
Rae Frawley	Moreton Bay Regional Council
Ross Fryar	GHD
David Harper	Victorian Coastal Council
Martyn Hazelwood	Geoscience Australia
Tim Hellsten	Greater Geelong City Council
Scott Hickie	NSW Parliament
Michele Higgins	Kingborough Council
Wendy Hoadley	Rockhampton Regional Council
John Hughes	District Council of Yankalilla
Barry Jarvis	Dorset Council
Jeff Johnson	Ballina Shire Council
Liz Johnstone	Central Coastal Board
Patrick Knight	Tweed Shire Council
Anne Leitch	CSIRO
Katie Milne	Tweed Shire Council
Patrick Morrissey	Byron Shire Council
Barbara Norman	University of Canberra

Michael Norris	Association of Bayside Municipalities
David Oxenham	Tweed Shire Council
Robert Pitt	Kempsey Shire Council
Anthony Ryan	CSIRO
Nick Sciulli	Victoria University
Steve Skull	Sunshine Coast Regional Council
Steve Smithyman	Bellarine Bayside
Ian Stubbs	Shire of Busselton
Mike Svikis	GHD
Simon Taylor	GHD
Bruce Thom	Australian Coastal Society
Rodger Tomlinson	Griffith Centre of Coastal Management
Chris Whiting	Moreton Bay Regional Council
Allan Young	NSW Maritime
Peter Young	Gold Coast City Council

Moved Professor Bruce Thom/Cr. Jan Barham

That the inaugural general meeting be chaired by Professor Tim Smith, a member of the interim steering committee.

CARRIED

Tim Smith declared the meeting open and extended a welcome to everyone in attendance. He said this was an important meeting and a major step towards establishment of the Alliance as a knowledge interface between coastal stakeholders, including councils and NRM groups, and research organisations.

He said that the agenda was straightforward:

- members of the interim steering committee will provide some background information on the Alliance, and its aims and objectives
- the activities that the group has undertaken to date will be provided
- adoption of the rules of the organisation
- election of the committee
- general business

Alan Stokes, a member of the interim steering committee, noted several apologies:

Sue Sargent - Burnet Mary Regional Group

Professor David Wood – Curtin University

Mayor Clifford Hayes – Bayside City Council, Melbourne

Will Steffen – Executive Director Climate Change Institute, ANU

Paul Maginn – Dept of Urban and Regional Planning, University of WA

Libby Mears – Chair of the Victorian Coastal Council

Craig Wilson – National Manager Environmental Sustainability, Asciano

Background on the Alliance – Alan Stokes

Alan Stokes provided some background information on Alliance. He said the initiative to establish the Australian Coastal Alliance was aimed at addressing a number of the issues facing councils and government agencies with coastal planning responsibilities and the Australian research community. That is how to bridge the gap between the needs of coastal stakeholders, including planners and

managers, and research organisations, such as CSIRO and many of our universities, which conduct relevant research in this area.

He said the idea of establishing such a body was initially proposed in the Sea Change Sustainability Charter, developed by the National Sea Change Taskforce in April 2006 and that the idea was progressed over the next couple of years in discussions with a range of bodies, including the former Coastal CRC, the Centre for Resource and Environmental Studies at the Australian National University and CSIRO. These groups have all agreed that such an alliance would provide a more effective interface between organizations with a common interest in the sustainability of the coastal environment and the research community.

Alan Stokes said the need for such a body has been clear since the Taskforce was first established as when it looked for the findings of relevant research projects that would help coastal councils in their planning and management role, it quickly became clear there was no easy way to find them and there is no national resource centre where coastal research material is consolidated or catalogued so that people can readily access relevant research material or no effective interface between organisations with coastal research needs and the teams conducting such research projects. He said that this new body is aimed at filling that gap.

The first step towards establishment of the body was the formation of an interim steering committee, which was announced a year ago at our last Australian Coastal Councils conference, held at Mandurah in WA. The members of the interim steering committee are as follows:

- Dr Bill de la Mare, Senior Principal Research Scientist, CSIRO Marine and Atmospheric Research representing CSIRO
- Neil Lazarow, Centre for Coastal Management, Griffith University representing the Australian Coastal Society
- Dorean Erhart, Natural Resource Management & Climate Change Policy Advisor, Local Government Association of Queensland, representing the State local government associations
- Professor Tim Smith is Director of the Sustainability Research Centre, The University of the Sunshine Coast representing the university sector
- Sue Sargent – Business Development and Planning Manager, Burnett Mary Regional Group, representing NRM and catchment management bodies
- Alan Stokes, Executive Director, National Sea Change Taskforce representing the National Sea Change Taskforce
- Professor David Wood, Pro Vice Chancellor, International, Curtin University of Technology representing the university sector

Alan Stokes said since that time the steering committee has identified a means of proceeding with the incorporation of the organization and it was felt that the most effective and the simplest way to do this was to seek registration of the organization as an incorporated association at a state level through the Department of Fair Trading in NSW, and once this step has been taken registration would be sought as an Australian Registrable Body through ASIC. He said the first step in this process has been the reservation of the name, Australian Coastal Alliance Inc., which has been reserved until May this year. The next step in the process is the adoption of the rules of the association, which is one of the main reasons for holding this meeting of interested persons and entities.

He said that providing the draft rules are adopted by the meeting, then an application will be made to the Office of Fair Trading for incorporation of the association, and following this an application to ASIC for registration as an Australian Registrable Body which will provide the Alliance with an ABN number, and enable it to be recognized as an incorporated entity that is then in a position to do business with other entities, including universities, local government authorities and government agencies.

What the Alliance will be doing - Bill de la Mare

Bill said that put simply the Alliance wanted to connect people who need the products of research with those who do research and that there are two major problems that the Alliance can help to solve – researchers left to their own devices don't always identify the relevant issues or provide research results that are usable for people trying to solve problems and that there is already a great deal that is known, much research has been done or is underway but the people who might benefit don't know about so if you don't know about it, it is the same as if it had never been done at all or it is presented in such a way that it is difficult to understand. He said the group was not pretending to know all the answers and they don't even know all the questions and that the Alliance was not intended to be an advocacy body but intended to provide a forum for exchange about research needs and in time it could also become an effective reference group for state and Federal government agencies engaged in coastal policy development.

He said the discussions and consultation about the role of the Alliance to date has resulted in the development of a draft statement of objectives for the new body with the main objective of the Alliance to be the national knowledge interface between coastal stakeholders and research organisations. To do this he said the Alliance will:

- facilitate the cumulative learning and sharing of information, experience and knowledge between end-users of research and research providers concerning the sustainable use and management of the coastal zone
- advise on the research needs of end-users, including communities, decision-makers and policy-makers responsible for coastal planning and management
- seek the adoption of knowledge through education, training and engagement to provide managers, planners and other stakeholders with the information needed to respond appropriately to issues that pose a risk to the coastal environment, such as climate change
- facilitate the use of integrated science and the adoption of planning and management tools to achieve the environmental, social and economic sustainability of Australia's coastal zone
- provide a primary point of contact by which partnerships and collaborations can be achieved between local and regional stakeholders and national and international agencies and research organisations
- work collaboratively with relevant government agencies, researchers, non-government organisations, communities and industry to achieve these objectives

He said the steering Committee has identified a range of activities which would be consistent with the statement of objectives, and which would help to meet the needs of the end users of coastal research and research providers including:

- the Australian Coastal Research Network as a directory or listing of researchers engaged in coastal research projects. There is a similar existing network of researchers in Europe and North America. Such a directory could help research teams identify suitable team members for specific projects. It could also provide a directory for relevant authorities, other coastal planners and managers to assist them find suitable providers for specific research needs. One of the objectives of the Alliance should be to inspire graduate students – the next generation of managers, planners and researchers - to seek the answers to new research questions, not just the traditional ones
- a new Co-operative Research Centre for Australia’s coast as the old one was not renewed
- the Australian Coastal Resource Centre as a web-based resource centre with the latest capability. The resource centre would provide links and commentary in relation to user research needs and existing and proposed research projects and act as a forum for discussion and exchange of ideas about research
- regional workshops for coastal managers to assist with complying with relevant state and Federal policies and tap into available funding programs. The sessions would highlight emerging issues impacting on coastal planners and decision-makers and would play an important role in identifying user research needs. The workshops would be linked to the web-based resource centre
- The steering committee has prepared a draft issues paper and additional copies were available.

Adoption of the Rules

Tim Smith thanked Bill De La Mare for articulating some of these ideas and said that the bottom line was that everyone at the meeting was passionate about coastal issues. He said that a copy of the draft rules had been circulated to a number of people and there were additional copies available for anyone who would like them. Tim Smith invited someone like to move that the draft constitution be adopted as the rules for the organisation.

Liz Johnstone queried section 3 concerning the membership qualifications of the Alliance and was concerned that it only covered incorporated bodies and individuals. The relevant Rule in the draft Constitution reads as follows:

3 Membership qualifications

(1) Membership of the Australian Coastal Alliance is open to any incorporated body with an interest or involvement in the cumulative learning and sharing of information, experience and knowledge between end-users of research and research providers concerning the sustainable use and management of the coastal zone.

Following discussion among attendees the meeting agreed to broaden the type of organisations that could become members.

Moved: Professor Bruce Thom/Cr. Jan Barham

That Rule 3.1 of the Rules of the Australian Coastal Alliance Inc be amended as follows:

3 Membership qualifications

(1) Membership of the Australian Coastal Alliance is open to any incorporated body, statutory or other approved organisation with an interest or involvement in the cumulative learning and sharing of information, experience and knowledge between end-users of research and research providers concerning the sustainable use and management of the coastal zone.

CARRIED

Election of the executive

Tim Smith said that there have been representatives of the various sectors involved in coastal research, either as end users or research providers, who have been serving on the steering committee for the past year and for the next 6 to 12 months, the Alliance will continue through the establishment phase, as it completes the process of incorporation and moves to establish an effective funding model.

He proposed that it would be appropriate for the interim steering committee members to be elected as the inaugural committee for the Alliance to complete this process, with the addition of Cr Jan Barham, the mayor of Byron Shire and Vice President General of the Local Government Association of NSW, to directly represent the local government sector.

Moved: Chris Whiting/Fiona Buchan

That the interim steering committee members be elected as the inaugural committee for the Alliance with the addition of Cr Jan Barham, the Mayor of Byron Shire

CARRIED

General Business

Tim Smith said it was the intention of the Alliance to be as open as possible and asked if there was any other business that anyone wished to raise.

The meeting then discussed areas of research interest as follows in order of being raised:

- Measurement of the economic and social impacts on non-resident population in peak seasons in coastal areas. This research would supplement the ABS ERP data.
- Cumulative and co-learning of researchers
- Affordable housing – selling off of Crown land in NSW used as caravan parks for ‘higher value’ use and the impact on previous residents; rising values pushing people – particularly older people out of the area; impact of rate increases due to higher property values
- Consistency in methodology, data monitoring esp. for estuaries
- Coastal erosion – how will coasts erode or not erode? Where? How? History?
- Population 2050 – there is a critical need for a national (=“all” rather than federal) approach to clearly define responsibilities in terms of who and why for the three levels of government.

This was described as Sustainable Settlement Planning

- Design of residential living
- Financial settlement – who is going to pay?
- Prezoning protection (studies to identify indigenous assets to protect them from removal as part of rezoning for growth)
- Carrying capacity
- Three levels of government
- Agriculture
- Energy
- Youth
- Ageing and disability

- Local government revenue – rate base
- Insurance industry research – incl. LG CC risk assessment
- Legal issues – property rights
- Risk assessment and risk management – development of quantitative methodology. We think about national disaster preparedness but not what to do afterwards so that we don't restore things that led to a problem in the first place
- Community engagement – capturing local knowledge, integration
- Cumulative impacts of biophysical and socio-economic threshold
- Coastal values – looking at social values: where do we want to be in 20/30 years? Judith Kildow (CA); ecological and environmental values e.g. do we want a marina vs a natural waterway?; community aspirations
- Inconsistency in planning in the country
- Identify 'best' practice and then ask: is this good enough?
- Communicating research, design, initiation and outcomes – that the design of research is at the beginning not tacked on at the end of the research; how best to get research findings to the audience
- Wetlands – response to SLR
- Evaluation of the Centre of Excellence

David Broyd queried how the Alliance was going to prioritize these issues.

Jan Barham suggested that students, professional bodies and volunteers could play a part in the Alliance.

Tim Smith thanked people for attending the meeting and their interest in the Alliance.

He closed the meeting at 15.04.

SESSION 12: FORUM DISCUSSION - Coastal Policy Priorities

Anne Leitch CSIRO Sustainable Ecosystems

Finally in this session, an issue that affects all coastal councils and their communities at some stage – the role of local media outlets in forming and shaping public opinion on local issues, particularly on controversial development issues – a topic touched on in both *Sea Change* and *East of Everything*.

Anne Leitch is a researcher with CSIRO and with James Cook University. She is also a resident of the local Byron Shire Council. She's been conducting a research project which has examined the sort of influence local media outlets have in shaping public opinion in relation to climate change and sea level rise, and she's here to tell us about it.

The final session began with discussion of an issue that affects all coastal councils and their communities at some stage – the role of local media outlets in forming and shaping public opinion on local issues, particularly on controversial development issues. Anne Leitch is a researcher with CSIRO and with James Cook University. She is also a resident of the local Byron Shire Council and has been conducting a research project which has examined the sort of influence local media outlets have in shaping public opinion in relation to climate change and sea level rise.

Anne Leitch told delegates her research presents a quantitative content analysis of Letters to the Editor (LTE) appearing in the two local newspapers in Byron Shire during the four months following the May 2009 storm event. In May 2009 a storm event led to erosion of beach environments in Byron Shire. The coastal erosion impacted on a number of private properties in the Belongil Spit area. This storm event, which occurred across Northern NSW over a few days, triggered a community discourse on the coastal erosion and Byron Shire Council's policy and management response of 'planned retreat'. Coincidentally this occurred just as Council was finalising its draft Coastal Zone Management Plan. This episode of community discourse was chosen as the subject of study because it highlights the issues that are raised by a community around a council's attempts to implement a coastal policy of planned retreat.

Byron Bay supports two local newspapers which are both delivered free to the community as print copies as well as being available online. The Byron Shire News was first published as the Byron News in 1971 and is part of the APN News & Media Ltd and shares many news stories with the Lismore-based regional newspaper the Northern Star. It is a weekly paper with a circulation of 17,500. The Byron Shire Echo is an independently owned, weekly newspaper established in 1986 to be a 'provocative community-based newspaper'. The Echo has a circulation of 21,000.

Letters to the editor (LTE) are written by everyday people who have a different status to the socio-political elites and so provide a 'voice' for everyday people to express their daily concerns and opinions and interact with their community. Scarcely studied, LTE provide some asymmetry, as only a few people are stimulated enough to write them, however they reveal what is valued by a community and are influential in opinion formation, both of local people as well as more broadly by decision makers and often comprise one of the most read sections of a newspaper.

The research was undertaken within the context of a number of significant changes in the media sector, including –

- Emergence of new forms of media, including Twitter and Facebook
- Concentration of news media ownership
- Falling newspaper readership
- Local newspaper still considered important for local issues

Local media outlets provide a window on local community opinion and have a key role in forming community opinion. They play an important role in how people perceive 'risk'. Rising sea level is perceived as part of a global problem. Excerpts from the LTE show that people were expressing views such as the following:

'Why don't I live at Belongil or New Brighton or any coastal area that is not protected by a big headland? Too big a risk! If you live in an earthquake zone or on the side of a volcano, you must expect the worst.'

'Dune systems are in a constant state of flux. Our problems have arisen by imposing an inflexible solution to a fluid situation.'

'if the Belongil Spit is lost or seriously breached low lying areas of Byron Bay will experience unprecedented flowing during severe weather conditions'

Letters to the editor revealed various opinions concerning political dimensions of the issue, including the following:

'the madness at Belongil has got nothing to do with managing the environment or being green it has everything to do with politics, jealousy, hypocrisy and some other agenda to which we are not privy'

'It is time for council to think again. Let's start with an acceptance of responsibility that goes with the job of councillor to act humanely in times of disaster; and lets start by adopting a less political and ideological approach to planning our shire and beaches'

'Council's interpretation of planned retreat seems to be masterful inaction, i.e. doing nothing'

'It seems no-one is listening'

'...needs to clearly understand the risk they are taking and the divisions they are creating in this community'

'The Belongil storm event was seen by the Greens as an opportunity to advance their policy of coastal retreat, instead of what should have been a humanitarian response as shown by other councils on the Gold and Sunshine Coasts'

'I think the council is in the right. Why? Because of the test of the greatest good for the greatest number'

'Some of the homeowners have worked very hard all their lives to be able to dream and choose where they would like to live and retire'

'There are many people who have been living in Belongil for decades who bought there initially because it was one of the cheapest options in Byron'

'Put aside the politics, the experts' reports, the petty jealousies or whatever else may come into the equation – and consider this simple fact – we live here. Our homes are here, our families are here, we live here! What part of that don't they understand? People's homes and potentially lives are at risk...'

What are the costs for the town of Byron Bay and the economy of the Byron Shire once the world famous beach disappears?

'Beaches are the verandah of the continent, where Australians are at their egalitarian best. Where everyone, rich and poor, locals and visitors, come to relax and play and strip off to their bare necessities. Wouldn't it be great to restore access along the beach you could walk from the Main Beach car park to Belongil Estuary (and onto Brunswick Heads) at all tides along the sand?'

Anne Leitch said local governments were a hybrid between the state and the community and played a critical role in managing multiple and contested ways of knowing and knowledge that exist between the worlds of politics, policy, science and the community.

She said sea level rise is a challenging issue. The facts are uncertain, the stakes are high and decisions are urgent. The issue brings values, resources and rights into conflict which mobilises a wide range of political and stakeholder interests. It challenges a traditional planning approach of a defined 'scientific' methodology leading to a clear solution.

She outlined some suggestions on how the issue could be addressed within a local community setting, as follows:

- Collaborate
- Develop a communication plan (not just a media release) that identifies aims, key stakeholders, key messages and risks. Then evaluate the effectiveness of the plan, modify as required and learn. This fits with broader community engagement (real engagement that elicits and integrates local knowledge)
- Use language that people can understand instead of communicating in ways that can lead to misunderstanding and misinformation.

Andrew Hammond - Chief Executive Officer, City of Rockingham

The final presentation of the conference was made by Andrew Hammond, Chief Executive Officer of the City of Rockingham, in Western Australia. He provided an outline of a co-operative regional approach to coastal adaptation action, which had been initiated by David Smith, the Mayor of the City of Bunbury. He said there were four coastal councils involved along the coastline south of Perth - the City of Rockingham, City of Mandurah, City of Bunbury and the Busselton Shire.

Andrew Hammond told delegates the concept of LGAs collaborating on a regional basis presented the potential for them to access funding opportunities to carry out vulnerability studies which could be used by the participating councils to back up their planning decisions under circumstances where these decisions were subject to appeal.

He said the region covered by the alliance had a population of 270,000 and these were growing rapidly, with growth rates of between 3% and 8%. It also had some 200kms of coastline. The recently released *Climate Change Risks to Australia's Coasts* report had identified this section of coastline as the area with the highest level of sea level rise risk in the State, collectively representing over 60 per cent of residential buildings at risk in Western Australia. That equates to between 11200 and 17300 dwellings valued at between \$3billion & \$4.6 billion. There was also a significant risk to coastal infrastructure in the region and significant areas of regional hinterland in the area were prone to extreme weather bushfire events. The current high level of population growth is not expected to decline.

He said the *Climate Change Risks to Australia's Coasts* report had identified a number of opportunities for local government involvement in dealing with priority coastal adaptation issues, including:

- Regional Risk Assessments
- Demonstration Strategies for areas exposed to high or extreme risk
- Provision of Information and Tools essential for decision making
- Research to reduce uncertainty about the magnitude of coastal risk from climate change.
- Ecosystems Review
- Community Engagement
- Building Local Government Capacity
- Key Activities

Of these the key activities were:

- Data Collection
- Scientific Analysis of Data
- Risk Assessment
- Strategy Review
- Organisational acceptance and implementation

He said the process involved in undertaking risk analysis at a regional scale involved reviewing existing data assembled by the participating LGAs and undertaking a review of current strategies. Additional research was required as the basis of scientific analysis and recommended actions. Relevant documents to be considered as part of the adaptation strategy development are:

- City Corporate Plans
- Local Planning Strategies
- Asset Management Plans
- Communication Strategies
- Risk Management Plans
- Major Infrastructure Plans
- Long Term Financial Plans
- Business Plans

Implementation of adaptation projects involved the following operations and programs:

- Planning Schemes
- Local Laws and Ordinances
- Infrastructure Maintenance
- Building Codes
- Community Education
- Day to day service delivery
- New infrastructure

Andrew Hammond said he believed voluntary regional local government alliances such as the Peron Naturaliste Initiative represented an effective and legitimate vehicle for undertaking adaptation projects delivered with Federal Government funding support. Local government was the most appropriate way to approach the issue of climate change adaptation because it had existing governance systems, local knowledge, and real accountability for the consequences of not doing anything.

The Peron Naturaliste Initiative, comprising the Cities of Bunbury, Mandurah and Rockingham and the Shire of Busselton is an excellent example of an alliance of Local Government's whose commitment to Climate Change action is commensurate with their concern for the future. Support from delegates is sought in requesting the Federal Government to deliver Climate Change adaptation program funding throughout the Nation via appropriately qualified, committed and capable local government alliances.

Facilitated Forum Discussion

The final session of the conference was a facilitated discussion to identify current priority issues for inclusion in the National Sea Change Taskforce Coastal Policy Framework. The objective of this document is to create a policy framework that integrates the environmental, social and economic wellbeing of the Australian coastline and its communities with the timely funding of hard and soft infrastructure.

The session was facilitated by Alan Stokes who told delegates that a similar document was prepared for the last election. One of the initiatives proposed in that document was a community infrastructure fund which was subsequently adopted by the Rudd government as the Regional and Local Community Infrastructure Program. He said the Taskforce did not claim total credit for the initiative but did initially propose the concept for the program adopted by the government.

Alan Stokes said the other initiative which came out of the last election was the *Caring for our Coasts Plan* developed by Peter Garrett and Jennie George and released prior to the 2007 election which gave a commitment that a Rudd government would play a national leadership role in coastal management. He said this was a clear commitment and the Taskforce intended to hold the Government to it. Reference to that commitment was made in the current draft discussion paper. He said the aim of the final session was to get some comment on the range of issues and policy initiatives which the Taskforce believed would go a long way towards addressing the challenges facing coastal councils and their communities. Once the policy framework was adopted these would be used for an advocacy campaign during the lead up to the federal election.

Alan Stokes said the document would be used as the basis of an advocacy campaign with all sides of politics and that this would occur in a favorable environment following the release of the George Report and the Department of Climate Change *Climate Change Risks to Australia's Coast* report. These reports had helped to set the scene for the initiatives proposed in the policy framework relating to climate change and other coastal issues, including population growth. He then sought input from delegates to identify gaps in the document or the need to strengthen the recommendations.

Ben van der Wijngaart (Kiama Council) congratulated the Taskforce on an excellent document covering most of the issues facing coastal communities. He identified a couple of omissions. The first one is a need for a reference to provide support, preservation and diversification of coastal agriculture and food production in particular. He said that some of the best remaining agricultural land would be adversely impacted by climate change. He said there was a need for recapitalization in investment in non broad acre agricultural enterprises and the associated skills

base. He said his council would support reference to this issue in the policy framework. The second issue was how to communicate the implications of climate change to people. He said there was a need for professional communication about climate change at a national level and that climate change scientists and politicians were either not very good at it or were not being believed, especially with the rise of climate change sceptics. Ben said councils were continually confronted with people's lack of concern with these issues because there are more immediate things. We need to communicate that this is an immediate thing and we have an immediate concern. Alan Stokes thanked Ben for his valuable contribution. He said the Taskforce had been concerned about agricultural land being lost and food security for the future and he would take these two points on board.

Helen Heydenrych (Shire of Denmark, WA) said that a lot of work done in coastal reserves in Denmark has been funded by NHT or NRM from the federal government and that funding had been lost. She said as a small council Denmark had relied on that funding. There are big gaps between *Caring for our Country* and *Caring for our Coasts*. A lot of people who use the coastal facilities in the Shire of Denmark are not part of the community: they are visitors with little interest in coming together to do this sort of work. She commented that local government has virtually lost access to federal grant funding.

Alan requested those making a point in the discussion follow it up with an email to him at the Taskforce email address (info@seachangetaskforce.org.au). He said the Taskforce was concerned there was a minimum population requirement attached to the growth component of the Regional and Local Community Infrastructure Program with populations of less than 30,000 missing out on that component.

Allan Young (NSW Maritime) said there was a need to discuss how to best support the George Report – whether to support the entire list of recommendations or to select winners among the recommendations. He said he would prefer to pick one recommendation, no. 19, which referred to the issue of liability.

Nick Abel (CSIRO) said the section on infrastructure was essentially about supplying infrastructure where it is demanded but that if that approach was taken it would reinforce and encourage current land use patterns. In order to adapt to sea level rise it was necessary to change land use patterns and careful thought needed to be given to where new infrastructure such as transport routes should go.

David Smith (City of Bunbury) commented that if you start to pick items out of the George Report, indicating that is where our focus lies, the rest of the recommendations will be thought of as not being supported by the local governments most affected by the whole climate change issue. He said every one of the recommendations was important and that Federal and state governments will sort out which ones they can implement first with least cost. He said if as a group we say that all of local government around the coast endorses the report that does carry weight. He said there are 20 odd marginal seats that changed hands at the last election. We need to say to the federal government, state governments and the public at large: the George report got it right and every one of those recommendations is critically important to the future of our coastal communities.

Debbie Blumel (Sunshine Coast Regional Council) endorsed those comments. She said she had discussed the forthcoming advocacy campaign with the Regional Director Strategy and Planning at Sunshine Coast and the Director of Environment and as a result her council would like to offer the Taskforce additional resources to expand its advocacy capacity. She said her council had recently undertaken some consultation on climate change and coastal management and was looking at ways to advance the national agenda with COAG. This would dovetail neatly with the Taskforce policy agenda so we would like to offer some resources for advocacy around those climate change issues in the George report and also about the policy paper. She made a second point following the discussions of Regional Development Australia. She said with the emergence of Regional Development Australia and the federal government's clear intent to hold the RDA's accountable for economic outcomes she would like to see an official comment about how the Sea Change Taskforce can work with Regional Development Australia to improve long term growth through productivity and housing affordability and work with them and add a reference in the paper to building long term prosperity and building productivity growth linking people to jobs, goods to transport, businesses to research and development and clusters of supply chains to customers which is what Ed Blakely had spoken about. She said it was important to focus on working to drive economic growth through productivity increases rather than population growth by working collaboratively with the RDAs.

Alan thanked Debbie and noted the appreciation for the offer of that support. He asked her to send him a note on how she would like that point expressed.

John Fergusson (Shoalhaven City Council) said he would like to see more emphasis on leadership by the Federal Government through COAG. He said councils had to deal with the highly contentious issue of the sterilisation of property values. He said after what had been discussed over the two days it came down to: do you accept the science? If you do you have to deal with it – what is the precautionary principle? What are the insurers going to do? What are the bankers going to do? He said that we need leadership and could sense the political will wilting in the face of the adverse community reaction. He said that as local councillors if we have the Federal government saying this is the science, if we have the state government saying this is the science and we have state government guidelines then this should be legislated so we don't have to end up in court. He said by all means endorse the George Report in part or in whole. It seemed an excellent bi-partisan report. One thing that must come out of it is a very firm position in respect to national and state leadership on determination of these policies.

Alan Stokes said he thought that captured the feeling in the room. He said there was a real legal dilemma and that legislation was dragging its heels.

Barbara Norman (University of Canberra) said she strongly supported the whole George report and the clearest message the group could take to the government would be to endorse the whole document, indicating we wanted the government to respond to the whole document because if you start to pick winners you are diluting your case.

Alan Stokes said there is an option to do both. Following the session on the George report conducted the day before there would be a draft communiqué prepared specifically on the George Report and seeking a Federal Government response. He said the second action flowing out of the conference is the draft policy priorities.

Katie Milne (Tweed Shire Council) commented that to make the government accountable for the George Report perhaps some requirement for annual reporting back on targets should be added.

Jan Barham (Byron Shire Council) noted there seemed to be some nervousness among members of the Federal Government about taking action. Her view was that they needed to know that there was support for them responding to the George report. For those of us with a bookshelf weighed down with all the previous reports the time to act was 20 years ago. Now it is up to us. We all have to go home to our communities and start writing to our politicians whatever party they are in, we need to talk about this with our communities and get positive messages out there. The Federal government has said it respects local government as the level of government at the coal face which has the closest contact with local communities. They need to know that if they come out and do something about this report they will be applauded and appreciated. "So my plea to everyone is go home from Byron Bay enthused, excited and writing letters and talking to people because if we don't do it now we're done for. I don't have children but I bet most of you do and I don't know how anyone can ever look their kids in the eye if we don't do everything we can to make this happen and if that means crawling to politicians, I don't care, I'm doing it... we've got to, it's the last chance.

Barry Sammels made the concluding remarks. He thanked delegates for attending and the sponsors for their support and said the Taskforce Committee would be meeting to finalise the policy frame working, acting on the input from people attending the session. He said how much the Taskforce appreciated the input from Jan Barham and Byron Shire Council for all the support they had provided to the event. He also thanked the conference speakers and invited representatives of councils that were not yet members of the Taskforce to consider taking up membership.