

INTERIM CONFERENCE REPORT

2013 Australian Coastal Councils Conference



South Australia 25 to 27 March 2013

22 April 2013



NATIONAL SEA CHANGE TASKFORCE INC

OVERVIEW

The 2013 Australian Coastal Councils Conference was convened by the National Sea Change Taskforce to provide a focus on the challenges facing the nation's coastal councils. These challenges include rapid population growth, climate change adaptation, legal and insurance risks associated with coastal planning and how to retain value and character in coastal communities.

In a departure from previous years, the 2013 conference was held in two different locations to enable delegates to consider issues facing coastal councils in both metropolitan and regional settings.

The first day of the conference, on Monday 25 March, was held at the Stamford Grand Hotel on the coastline at Glenelg, in Adelaide. The following two days were held at Victor Harbor and the historic river port of Goolwa, on the Fleurieu Peninsula, near the mouth of the Murray River.

Highlights of the event included the following:

- Independent MP Rob Oakeshott was a keynote speaker on the topic of *The Need for a National Policy for the Coast*;
- Professor Graeme Hugo of The University of Adelaide released the findings of ground-breaking research into the impact of tourists and other non-resident populations on Australia's coastal communities. The research found a large number of people were missing from these communities when the 2011 Census data was collected.
- Australia's peak coastal groups launched a campaign to be conducted in the period leading up to the Federal election. The campaign is aimed at promoting a coordinated national approach to managing the Australian coast.
- Conference sessions on Tuesday 26 March focused on strategies that coastal councils could adopt to retain the values and character of coastal communities.
- Environmental lawyer Andrew Beatty presented a keynote address on *Managing and Mitigating Legal Risks on the Coast*.

A copy of the final program for the 2013 Australian Coastal Councils Conference is provided in the following pages, together with additional information on the presentations made at the event.

1. PROGRAM

MONDAY 25 MARCH 2013 - CONFERENCE DAY 1

- 09:00 WELCOME and INTRODUCTION – Mayor **BARRY SAMMELS**, Chair, National Sea Change Taskforce and Mayor of the City of Rockingham (WA)
- 09:05 CONFERENCE OPENING - Hon **JOHN RAU**, Deputy Premier of South Australia Attorney-General, Minister for Planning, Minister for Industrial Relations and Minister for Business Services and Consumers
- 09:15 SESSION AND DISCUSSION: **Current Coastal Issues - A National Perspective**
- Presentations with representatives of coastal councils from around Australia who discuss key issues facing their communities
- 10:00 KEYNOTE ADDRESS: **Non-Resident Populations in Coastal Communities**
- Keynote address and discussion with Professor **GRAEME HUGO** AO, Professor of Geography at the University of Adelaide, who will present the findings of a research project commissioned by the National Sea Change Taskforce aimed at developing a methodology for assessing data on the impact of tourists and other non-residents in coastal communities
- 11:00 KEYNOTE ADDRESS: **The Need for a National Policy for the Coast.**
- Keynote address by Mr **ROB OAKESHOTT** MP, Member for Lyne
- 11:30 KEYNOTE ADDRESS: **Managing Legal Risks on the Coast**
- Keynote address and discussion with Mr **ANDREW BEATTY**, Beatty Legal
- 12:00 SESSION AND DISCUSSION: **2013 Campaign for the Coast**
- Panel discussion on a collaborative advocacy strategy being developed by the National Sea Change Taskforce in association with other key coastal groups to campaign for the protection of our coast and its communities
- 13:15 CONCURRENT SESSIONS:
- STREAM MON A:** Field tour
- STREAM MON B:** Workshop – Non-resident coastal populations led by Professor GRAEME HUGO AO

15.30 CONCURRENT SESSIONS:

STREAM MON C: Field Tour

STREAM MON D: Workshop – Managing Legal Risks on the Coast led by
Mr ANDREW BEATTY

16:55 DAY ONE CONCLUDED

TUESDAY 26 MARCH 2013 – CONFERENCE DAY 2

09:00 KEYNOTE ADDRESS: **Toward a National Coastal Policy**

Keynote address and discussion with Professor **NICK HARVEY**, Executive Dean,
Faculty of Humanities and Social Sciences, The University of Adelaide

09:30 CASE STUDY SESSION AND DISCUSSION: **Retaining Coastal
Character**

Presentations and panel discussion on the history of the southern Fleurieu
Peninsula and initiatives to retain the heritage and community character.
Speakers:

Mayor **KYM MCHUGH**, Alexandrina Council and President Local Government
Association of South Australia

Cr **PAT CHIGWIDDEN**, City of Victor Harbor

Ms **SALLY ROBERTS**, General Manager Environment and Development Services,
Alexandrina Council

10:00 RESEARCH FORUM AND DISCUSSION: **Values and Character of
Coastal Australia**

Speaker: Dr **GARRY MIDDLE**, Course Coordinator, Department of Urban and
Regional Planning, Curtin University

11:00 KEYNOTE ADDRESS AND DISCUSSION: **Australia's Extreme Weather Events: A
Sign of Things to Come?** Dr **ROB VERTESSY**, Director and CEO, Bureau of
Meteorology

11.30 SESSION AND DISCUSSION: **Disaster Response and Recovery**

Panel discussion on responses to recent extreme weather events in
coastal areas

- 12:00 SESSION AND DISCUSSION: **Affordable Community Solar Program**
- Mr **RICHARD TURNER**, Founder and Chief Executive Officer, Zen Home Energy Systems
- 13:20 CONCURRENT SESSIONS
- STREAM TUE A** Field tour Alexandrina Council area including historic Port Elliot, Middleton, Goolwa township and Goolwa barrage
- STREAM TUE B** Workshop: Affordable Community Solar Program – led by Mr RICHARD TURNER
- 15:00 **STREAM TUE C** Field tour City of Victor Harbor including viewing of trial hybrid solar and wind light, The Causeway in Victor Harbor and the *Beyond* display village
- 15:30 **STREAM TUE D** Workshop: Values and Character of Coastal Australia – led by Dr GARRY MIDDLE
- 17:00 DAY TWO CONCLUDED

WEDNESDAY 27 MARCH 2013 - CONFERENCE DAY THREE

- 09:00 RESEARCH FORUM AND DISCUSSION: **Sustainable Coastal Communities and Climate Adaptation**
- The session will present the findings of the CSIRO Coastal Collaboration Cluster research project which provides critical insights into experience and understanding of coastal management in Australia. The findings highlight the role of research and community engagement in coastal management
- Speakers: Associate Professor **LAURA STOCKER**, Deputy Leader, Coastal Collaboration Cluster and Professor **RICHARD KENCHINGTON**, Leader Integration Theme, Coastal Collaboration Cluster
- 09:45 RESEARCH FORUM AND DISCUSSION: **Climate Change Adaptation Good Practice**
- This NCCARF project identifies good practice in climate change adaptation and provides tangible and practical examples
- Speaker: Dr **DAVID RISSIK**, Deputy Director (General Manager), National Climate Change Adaptation Research Facility (NCCARF), Griffith University

11.00 RESEARCH FORUM AND DISCUSSION: **Creation of the Australian Coastal Ecosystems Facility**

Speaker: Mr **JONATHON HODGE**, Deputy Director of TERN Australian Coastal Ecosystem Facility (ACEF), CSIRO Wealth from Oceans Flagship. The ACEF collects and distributes key coastal data sets for use in policy and management decisions about the protection and use of coastal assets. ACEF is working with local, regional, state and federal agencies to make it easier to contribute data and information to the national space, making it easier to discover, access and use.

11.30 SESSION AND DISCUSSION: **Marine Parks –The Implications for Coastal Communities**

Presentations and discussion on the implications of the new Commonwealth and State marine parks established for the conservation of marine life, ecosystems and habitats.

Speakers: Mr **CHRIS THOMAS**, State Marine Parks Manager, South Australian Department of Environment, Water and Natural Resources; Cr **DAVID HALL**, Deputy Mayor, City of Victor Harbor and former Director of Fisheries South Australia

12:00 CONCURRENT WORKSHOP SESSIONS
STREAM WED A – Sustainable Coastal Communities and Climate Adaptation

STREAM WED B - Climate Adaptation Good Practice.

14:00 FINAL SESSION AND DISCUSSION: **2013 Campaign for the Coast**

Presentation and discussion on a collaborative national coastal advocacy strategy for the 2013 Federal election

15.00 CONFERENCE CONCLUDED

2. PRESENTATIONS - Details

CONFERENCE DAY ONE – Monday 25 March 2013

Welcome – Barry Sammels, Chair – National Sea Change Taskforce

At the commencement of the conference, Chair Barry Sammels acknowledged the Kaurna people as the traditional owners and custodians of the land on which the meeting was held. He welcomed delegates and said the conference is an annual highlight of the year for the Taskforce and its members.

Barry noted that coastal councils and their communities continue to face a complex and difficult range of issues such as rapid population growth and increasing demand for infrastructure and services; the difficulty of managing legal risks associated with coastal planning; the challenge of retaining community values and character; and the impact of floods and other extreme weather events on coastal communities

He said one of the things that distinguishes the Australian Coastal Councils Conference from others is that the Taskforce was focused on achieving outcomes and that some of the presentations delegates would hear over the next couple of days would illustrate this point very clearly.

For example, he said, later in the morning delegates would hear a keynote address by Professor Graeme Hugo, of the University of Adelaide, who would present the findings of a research project aimed at finding a methodology to address one of the big issues facing our councils – how to quantify the impact of non-resident populations on coastal communities.

Also on the program– two other projects the Taskforce is organising on behalf of member councils. The first is a legal project being undertaken by leading environmental and planning lawyer, Andrew Beatty. This project is aimed at helping coastal councils to identify, manage and mitigate their legal risks in an environment of shifting climate change policy. The other project is a research project being undertaken by Dr Garry Middle, of Curtin University in Western Australia, which is aimed at helping councils work out how to retain the values and character of coastal communities.

Barry said each of these projects illustrated the benefits of coming together and acting collectively. The costs involved in commissioning these sort of projects is beyond the capacity of many individual councils. But by pooling resources and sharing the costs, it was possible to commission this sort of high quality work which is of value and benefit both to the individual councils participating in the project and to other coastal councils.

He acknowledged the assistance received from the organisations that have lent their support to this conference and said that without their help it would not have been possible to present the program that had been organised. He specifically acknowledged:

Alexandrina Council
The City of Victor Harbor
CSIRO
NCCARF – the National Climate Change Adaptation Research Facility
Zen Energy Systems

He called on the Hon John Rau MP, the Deputy Premier of South Australia and Attorney-General, to officially open the conference.

OFFICIAL OPENING

The Hon John Rau welcomed delegates to the conference, in particular those from other states. He said that as Planning Minister he has had experience of dealing with change in various communities, and he noted that change is always difficult. He said the challenge is to find productive, effective ways of engaging with the community about the issues involved, whether it is population growth, infrastructure or whatever the issue is. Without community comprehension of what is being planned there was a good chance the matter would end in discord. He said from the point of view of the South Australian government he was keen to engage in any constructive policy development. He said the issues to be discussed at the event are all about looking after communities. He wished the delegates well for the remainder of the event.

COASTAL ISSUES - A NATIONAL PERSPECTIVE

As in previous conferences, the first session of the day highlighted some of the common issues facing coastal councils and their communities.

Lorraine Rosenberg, Mayor of the City of Onkaparinga, made a presentation highlighting coastal management issues affecting her council including sand renourishment to maintain beach amenity at Christies Beach, the need to upgrade existing sea walls, and a program to stabilize cliffs at Witton Bluff to mitigate risk to the public. She said the council's coastline is 31km long, consisting of limestone cliffs, estuarine environments, beaches and extensive sand dunes. Mayor Rosenberg said the work involved in these projects involved major expenditure on the part of the Council for an amenity that was used not just by local ratepayers but by the wider community. She said there was a need for 1.8km of sea wall to be constructed at Christies beach, which will cost approximately \$5 million. The council has identified 400ms of this as an absolute priority. This section will cost \$1.25 million and in the meantime the council would have discussions with the State Government about funds for the remaining length of sea wall. There was also considerable expense in addressing erosion which was undercutting Witton Bluff and which posed a threat to the public and to infrastructure including a major road, valuable residential properties, bike trails and a public park. She said the Coastal Protection Board had an annual budget of \$500,000, which was nowhere near enough. There was a need for a rethink of the funding model between State, Federal and local government in order to fund essential coastal works.

Steve Cornish, Strategic Development Manager of Surf Life Saving South Australia, made a presentation on the topic of water safety and multicultural communities. He said the number of coastal drowning deaths that occur to persons of foreign ethnicity remains a significant proportion of the total drowning toll. There have been 262 fatalities of persons of known foreign ethnicity from 2004-2012, representing 36% of all coastal drowning deaths. 79 (30%) of these were international tourists who represent 11% of all coastal drowning deaths. There were 33 (28%) deaths of persons of known foreign ethnicity in 2011-12, 13 (39%) were international tourists. Two regions most represented in these statistics are China (15%) and the United Kingdom (12%). Most of the drowning deaths occurred in NSW (52%), while swimming and wading (33%) or rock fishing (24%), in a beach (42%) or rock/cliff (33%) location.

Steve said Surf Life Saving had developed a range of classroom resources which are available to Adult Migrant English Services. The home for surf safety online, Beachsafe.org.au is also translated into over 40 languages. It is also available as a mobile app. A range of surf safety resources including posters, brochures and DVDs are available by contacting Surf Life Saving. We can also provide files for services to add their own logo and print as necessary. For international tourists our strategy extends to television commercials being aired on a range of strategically targeted inbound airlines. SLS are also involved in the Australian Backpacker and Youth Tourism Advisory Panels national project, *The Backpacker Health and Safety Poster*. This poster is well supported and distributed to accommodation providers and throughout the tourism sector.

Sharon Cadwallader, Councillor, Ballina Shire Council and a member of the National Sea Change Taskforce Committee of Management. Sharon told delegates that her Shire has 32kms of sandy beaches which attract large numbers of international visitors. In 2010 there were tragic drownings locally, including a Korean tourist who was part of a group which did not have a working knowledge of English, which was thought to be a contributing factor. She asked whether as a community we are doing enough to prevent these tragedies – not just along the coast but in our river systems. Sharon said a lot of international tourists, overseas students and other multicultural visitors did not have experience of waterways. She said there was a need for all levels of government to work together to tackle the problem. She outlined what her local council was doing, including placing displays at the local Ballina Airport and having staff with language skills available to pass on safety information to visitors. In her view, this was not as effective as making information available at ports on entry into the country, but it helps. She said there was a need for a pro-active targeted response to the risks facing international visitors and there is a need for the issue to be tackled by the Federal Government working with the States and local government.

NON-RESIDENT POPULATIONS IN COASTAL COMMUNITIES - Professor Graeme Hugo

Professor Graeme Hugo is Professor of Geography and Director of the National Centre for Social Applications of Geographic Information Systems at the University of Adelaide. He made a keynote address to present the findings of groundbreaking research study aimed at developing a methodology for collecting data on the impact of non-resident populations on coastal communities. The research project had been commissioned by the National Sea Change Taskforce in partnership with 11 coastal councils who participated as case study areas. Professor Hugo told delegates that population is constantly changing. A lot of this change is incremental and that the changes only become apparent when the national census is undertaken.

The census is fundamental and the way in which it is conducted is to allocate an individual or household to a particular point or area. This place is their usual place of residence or their place of residence on the night of the census. However, he said, in the modern world the home is only one of the spaces in which individuals spend substantial time. Other places varied according to the time of day, the time of week and the time of year. He suggested that these other population geographies could be used to consider another approach to collecting data on the location of individuals other than at their usual place of residence, because while the present methodology provides an accurate reflection of the number of permanent residents in an area, it does not reflect the number of long-term visitors or the number of short term visitors, who are not detected at all. He said there were several ways in which temporary populations could be measured, such as a direct count or indirect measures, such as an algorithm linking fluctuations of an indicator variable to populations. Such as waste water, telephone traffic and volumes of rubbish. These could provide a daily, weekly, monthly or season variation in the size of a population, which could be expressed in terms of full-time resident equivalents.

Professor Hugo said the aim of the study undertaken by the University of Adelaide was to understand the size and characteristics of temporary populations in 11 local government areas, but focusing on nine councils that had undertaken a survey of a sample of non-resident property owners selected from local ratepayer records. These participating local government areas were Busselton, Byron, Cairns, East Gippsland, Eurobodalla, Mandurah, Mornington Peninsula, Shoalhaven and Surf Coast. This involved distributing a questionnaire to 9,000 non-resident ratepayers. Of these, more than 2100 completed survey forms were returned, which represented a high response rate. The study also involved analysis of other sources of data. He said the survey revealed that nearly 70% of properties owned by non-resident ratepayers were not occupied on the night the 2011 census was conducted and that the findings had important ramifications for coastal councils and their communities.

He pointed out that Australia had one of the most mobile populations in the world which is one of the reasons why there is such a discernible difference between the number of people in coastal communities in winter, when the Census is conducted, and at other times of the year when many people such as absentee property owners and tourists are present. Professor Hugo said that in some coastal areas there is a big difference between the summer and holiday population peaks and the permanent population figures, which are used to calculate the allocation of resources such as financial assistance grants. He said if the Census was conducted in summer rather than winter a much larger percentage of these properties would be occupied and therefore a totally different picture of the population numbers in coastal council areas would emerge. The Mornington Peninsula Shire population, for example, would have increased by almost 26,000, Cairns Regional Council by 15,000, Shoalhaven City Council by nearly 12,000 and the City of Mandurah (WA) by more than 10,000.

Professor Hugo said a large percentage of non-resident property owners are baby boomers aged between 45 and 64 at the time of the survey who plan to move permanently to their coastal property. Some 60% of people who plan to move to their coastal property within the next two years are baby boomers. The percentage of baby boomers planning to make the move between two and five years from now is even higher – 67%.

Professor Hugo said the study had also analysed use of tourist accommodation, which identified large numbers of tourists staying in coastal areas in addition to the 'missing' people linked with properties owned by absentee ratepayers. Cairns Regional Council, for example, had more than 13,000 tourists staying in the local area, while Shoalhaven City Council had more than 9,000. The local government areas of Busselton, East Gippsland, Eurobodalla and Mornington Peninsula each had more than 3,000 tourists in local accommodation. He said when the people 'missing' from the Census were added to the number of tourists staying in these communities it was possible to get some idea of the large number of people using local services and facilities who do not show up in the data on permanent population. He said the findings would form part of a submission to the Australian Bureau of Statistics, which is currently conducting a major review of the Census content and methodology. The findings will also help coastal councils better plan to meet future infrastructure and service needs of their communities.

Professor Hugo said assigning people to a single place in censuses on the basis of usual residence is an increasingly limited technique of establishing the 'population' of areas. He said there is a need to develop a suite of concepts of the population of areas to take account of night/day, weekly and seasonal variations in the number of people *actually* in that area. This would involve both modification of and additional census questions and supplementing it with other data. He said the study had clearly demonstrated substantial variations in the numbers of people in coastal LGAs at different times. For many LGAs the census represents a low trough in these fluctuations. To anticipate the demand for many goods and services there is a need to establish the scale of these fluctuations. He said there was no single direct measurement method available but an indirect approach using mobile telephone traffic had significant possibilities. He said the next step would be to make a detailed submission to the Australian Bureau of Statistics to include second homes in the census and to develop the concept of multiple population geographies from the census, by developing a robust mathematical methodology based on using mobile telephone data to provide census based estimates of fluctuations between weekday and weekend populations, and seasonal populations.

2013 CAMPAIGN FOR THE COAST - Alan Stokes

Alan Stokes, the executive director of the National Sea Change Taskforce, provided an outline of an initiative to join with other coastal groups to mount a collaborative advocacy campaign during the period leading up to the Federal election to promote a coordinated national approach to managing the Australian coast for the benefit of future generations. He said the groups involved in the alliance were the Association of Bayside Municipalities (Victoria); Australian Coastal Society; National Sea Change Taskforce; Queensland Regional NRM Groups Collective; Surf Life Saving Australia; Surfrider Foundation Australia and the Sydney Coastal Councils Group.

Alan Stokes said Australians love the coast but as a nation we have ignored it for far too long and done too little to protect it from significant population pressures, rising sea levels and more frequent extreme weather events. He said more than 19.5 million people live in the Australian coastal zone and many of them are represented by groups in the Alliance. This is about 86% of the nation's total population and is increasing year by year, especially in fast-growing coastal areas outside the capital cities. He said at the forthcoming Federal election the alliance will be asking all Australians who live, work or play in coastal areas to vote for the coast by supporting candidates that care for our unique coastal zone and are committed to protecting it for the future.

Alan Stokes said the coastal alliance is preparing a National Coastal Policy Initiative which members and candidates in coastal electorates will be asked to support. This will include the key policy initiatives needed to secure the future of the Australian coast. Voters in these electorates can then make up their minds about which candidates deserve their support at the election. He said as the bi-partisan Australian Parliamentary report *Managing our coastal zone in a changing climate* pointed out in 2009 – the time to act on these issues is now. He said current responses to coastal management issues are reactionary and lacking consistency, with each state and tier of government taking its own, inconsistent approach. What is needed is a collaborative national response to coastal planning and management involving all three levels of government, he said. But this will only happen with the Australian Government taking the initiative and playing a leadership role while supporting and funding sustainable management practices.

THE NEED FOR A NATIONAL POLICY FOR THE COAST – The Hon Rob Oakeshott MP

Mr Oakeshott started his presentation by saying that he appreciated being invited to speak at the conference and acknowledged the formation of the Coastal Alliance. He stated that his one and only message to delegates was that it is time to fight for the coast in the lead up to the election on 14 September and said that more generally there was a need to push all levels of government harder than what is currently happening to get the many, many issues that bring everyone together today on the agenda more than what they are and mount the pressure. He said he was thrilled that the Coastal Alliance had been formed and that it was an inclusive exercise that he hoped delegates and others through their various networks would invite more bodies to get involved to mount more pressure to get the issues addressed sooner. He described it is a crossroads time with a crossroads election coming on 14 September and because it was a crossroads election meetings such as this conference are crossroads meetings and the decisions delegates are going to make to shape how you deal with the next six months to get the many issues of coastal Australia and more on the agenda than what they are and dealing with local members, candidates and parties.

He said he came to praise the National Sea Change Taskforce and to rev all delegates up at the same time. He praised the delegates and their organisation and described them as the custodians at the frontline of many of the great policy issues facing Australia such as the environment, biodiversity, native vegetation as coastal communities are grappling with all these issues and more than many others.

Mr Oakeshott said examples of coastal issues could be seen on the Glenelg beach today and in recent natural disasters. He mentioned tornadoes and storms up the coast. He described 8 weeks of rain and being belted into submission over the last 8 weeks by heavy seas, extraordinary rain and high winds all combined that had applied more pressure on existing resources. He said he was not the one to link these all together in Parliament around climate change but that forums like this conference is where we should discuss this.

He said if it is good enough for the Australian Defence Force to start doing planning for the implication climate change and sea level rise then surely it is good enough for other arms of

government including Federal and State relationships with local councils to do similar planning, mitigation and adaptation work within the many communities in Australia that are exposed.

Mr Oakeshott said the US Defence Force says it is their greatest issue in the Asia Pacific region and queried why we as a matter of urgency were not placing a higher status on planning, mitigation and adaptation at a council level in particular and resourcing that accordingly on the back of that planning work that has been done and is being done already and people are shaking an empty bucket of funding in the critical response to the very good work that has already been done. He said he would also praise the audience as the custodians of Australia's ageing population and very much on the frontline and if we don't get it right in coastal communities Australia isn't going to get it right on how to deal with an ageing population.

He said the next Intergenerational Report was due next year and he considered that it will say the same as the other have said and that is that we're ageing and that there are infrastructure demands and governments should co-ordinate to respond accordingly. He said his response is "great, let's do it". Of all communities and all alliances he said that the Taskforce leads on that topic and hoped that it can push governments to do what they have already been advised to do many, many times before. He said that with an ageing population his view that is not as widely considered in public policy as it should be is that as people are living longer which was great, there are all sorts of expectations and demands with healthy living.

Mr Oakeshott said that what isn't given the consideration it deserved not only by governments, but also by individual families is that because we are living longer when something does happen the planning around decision making on aged care facilities, nursing homes, hospital based care as these decisions needed to be made very quickly. There is a danger for all the good news of healthy living when the crunch does come for a family and a community to be in an environment where the acuity is higher and planning is less there's a whole new level of issues that public policy is needing to grapple with lots more people expecting some sort of emergency response to what has happened. He said this is an issue for coastal communities with high growth high retiree populations such as mine on the mid North coast of NSW where we really are grappling with a changed environment in aged care and an ageing community based on that rush when something does happen after someone has had a wonderful and long life living as independently as possible.

He said also that the group were the custodians on the frontline of population growth and all the population movement and he saw as many challenges with people moving 30 or 40kms down a valley to coastal areas as he did from traditional population mythology of people coming from overseas and that regional and sub-regional movement of people applied pressures in his electorate. While rail was built up the coast 100 years ago within the last 20 years sleepy little fishing villages have grown so that now hospitals, sewerage, water, other services, lifestyle and amenity were wanted and this was a massive shift within certain valleys, let alone in States or within a country. Mr Oakeshott said he sympathized enormously with the expectations of what is in a community is having to be met in such a short and narrow time frame of 5 or 10 years as he said "normally" the building of a community happens over 50 to 100 years and all the infrastructure comes over time.

He said the group was also custodians of Australians on holiday and that this is not recognised as well as it should be by public policy. He noted that in Australia at the back of every summer he hears that in his community and other towns such as Crescent Head through to Byron - where he noted that some brave individual has raised a bed tax and got shot down in a couple of days - are being loved to death with the local community exploding. Mr Oakeshott said that public policy needs to understand this better than what it does and respond to it better. He said that there were very positive benefits that come with domestic tourism yet the enormous demands and complexities that come when people rent out houses or rooms or unregulated backpackers accommodation with all the various demands on sewerage, water and amenity are not addressed.

He said that another thing that does not get the recognition deserved was that the members of group were custodians for in many ways Australia's heritage - both the 200 year and the 40,000 year heritage. He commented that while it was a personal gripe of his in Parliament all eyes in were on the Northern Territory or an image of a young boy or girl in the dusty outback town if people looked at the population data to see where Australia's Aboriginal population lived they would find there more than 50% of Australia's Aboriginal population lives in a coastal window between Sydney and Rockhampton yet he guessed this would get 10% of resourcing to deal with the many issues and complexities to deal with Aboriginal Australia whereas he said public policy continues for all the noble and right reasons goes very remote or for jurisdictional reasons to the Northern Territory and very little else.

Mr Oakeshott said the same can be said about our 200 year heritage. As someone who lives in Australia's fourth or fifth oldest town depending on who you talk to he was aware of economic growth and the very difficult balance with the wonderful heritage that can be seen to get in the way of economic growth and it was a difficult balance to strike.

He said that he was not just doing a Brutus praising Caesar exercise in praising delegates as he said they were on the frontline of all the great issues, the environment, economy, heritage tourism and said they and we have got them all. Mr Oakeshott commented that he was pleased the Taskforce is in agreement on this and urged the campaign to be stepped up with the Taskforce move from being the nice guys on the coast to really advocate and being intolerable of anyone saying "I'll throw you a biscuit on this issue and that issue" and say no.

Mr Oakeshott said that it was in the nation's interest that this package is dealt with as outlined by the alliance and dealt with comprehensively and he thanked the Taskforce and invited others to be involved and more importantly looked forward to potentially formal signings leading to the release of a National Coastal Policy as an agenda for the National Coastal Alliance.

Referring to what he described as a "rev up" he urged that as the custodians of the coast the group not be normalised and not to allow governments to just accept the organisation. He urged the group not to be a thorn in the side of governments as a difficult problem that may get resolved one day but not right now.

One the political front Mr Oakeshott said he had a view that may not be shared by many in the room that many of the traditional power structures are failing in Australia today. He commented that the ALP was unstable and the LNP has been spending plenty of time over the last few years

destabilising and therefore he said that in this environment the new politics of issues based organisations were being successful at the moment. He cited the National Disability Insurance Scheme that was passed the previous week (applause) in the mess and noise of personality politics as an example where because it was issues based it didn't leave the political parties an opportunity to move. He also raised the water trigger in the Environment Protection Act which passed the Lower House on a unanimous vote the previous week as another example of a strong community network.

Mr Oakeshott said that in all the lament of the moment we all have choices to make whether it was doing things in the old style way of being nice and bowing to political parties and maybe getting an election promise or two and hoping it is delivered or forming issues based alliances as the Taskforce has done by putting clear issues on the table as you are about to do, not accepting no for an answer, campaigning well, co-ordinating well and advocating strongly and as custodians of the coast we would be building a better country as a consequence.

He said that he is in the corner of the latter and hoped delegates were too and if that was the case that this is moment for coastal Australia and concluded by saying "let's make it happen".

MITIGATING LEGAL RISKS ARISING FROM PREDICTED CLIMATE CHANGE IMPACTS

Andrew Beatty, a solicitor specializing in planning and environmental law, is the principal and director of Beatty Legal, a Sydney firm specializing in environmental law. He delivered a keynote address to delegates on the best approach to mitigating legal risks arising from predicted climate change impacts.

He quoted from the latest publication about local government and climate change risk – the Productivity Commission report, *Barriers to Effective Climate Change Adaptation*, which had been released in September 2012. He said section 8.2 of the report stated that:

"Local governments' uncertainty about their legal liability is a barrier to effective climate change adaptation. State Governments should clarify the legal liability of councils with respect to climate change adaptation matters and the processes required to manage that liability."

He said the view of the role of the various levels of government that he had picked up from participants at a recent workshop on climate change conducted by the Department of Climate Change and Energy Efficiency was that 'the Commonwealth has the money, the states have the power and local government has the problems.'

We have always had a climate that changes. The issue that is now exercising a lot of people's minds is how quickly it is changing and what is causing that change. For people in local government, however, it doesn't matter what you think are the causes. What does matter is what judges and members of planning tribunals think because ultimately they are shaping the law in this area faster and more effectively than State or Federal Governments. All the cases that involve climate change adaptation and climate change risk are in turn reverberating through State and Federal governments. In many ways our elected officials are responding to the views of the unelected judiciary.

It is often the case, however, that hard cases make bad law. They often turn on the facts. So it is not always a recipe for a good way to make law. Many of you will have seen the report produced recently by the Climate Commission called *The Angry Summer*. I do not think that anybody on the east coast, or the west coast, would deny that we have had an extraordinary summer. What that demonstrates is not so much that climate change is real, or that human beings are contributing to climate change. What it demonstrates is that there are extreme weather events that are occurring which we have to adapt to. It is not really a question of what the people in this room think about climate change because ultimately, although you are decision makers, there are lots of other people who are making decisions which affect the environment in which you discharge your statutory responsibilities. Those people are insurers, bankers, scientists and, of course, the planning courts and planning tribunals. That is the decision-making environment in which coastal councils now find themselves in. He said legal action can arise under various circumstances. Risks arise if you take into account that which you should not, or fail to take into account that which you should, or if you just get it obviously wrong on the facts. Also, information which is relevant but unpalatable cannot be “uninvented” or buried and even the media will find out what you knew or should have known. Every decision you make, or don’t make, will be scrutinized through the prism of what did you know, or should have known, at the time you made the decision.

Andrew Beatty outlined three risk reduction tools that are available to councils to mitigate the risk of legal action. The first is current, relevant and reliable knowledge about what is happening in your local area. There is enough information available in the public domain to indicate what the impacts of climate change are likely to be. If you find yourself before a court in relation to a coastal planning matter that information will be used to prove what you should have known. He said the second thing you will need is courage. You have a statutory responsibility to lead your local community and at times that can mean making hard and unpopular decisions. That is why the Productivity Commission stated what it did in Section 8.2 of its report. In other words, the State Government needs to give you the resources and guidance that you require to make the right decisions. Andrew said the third thing that councilors need is some fortifications because if you have the knowledge, and you have the courage some of the decisions you make will make people unhappy. The Productivity Commission has proposed that you need some legal indemnification for making well-informed, good faith decisions. In NSW there is Section 733 of the Local Government Act, which makes it clear that if you act on reliable, relevant information and you act in good faith then when you make a decision in relation to climate change you have a statutory indemnity from a suit in negligence.

COMMUNITY ENGAGEMENT – LEADING CHANGE ON CLIMATE CHANGE

Allan Cowley, Manager Strategic Planning, Mornington Peninsula Shire Council, outlined the Shire’s experience in engaging with the community in a series of climate change ‘conversations’ that were held in 2008. The meetings attracted more than 3000 attendees, with more than 1700 survey forms returned plus letters and emails. He said the particular geography and geomorphology of the Peninsula results in a wide range of coastal conditions – from the surf beaches to the south, the family beaches on Port Phillip but with areas of eroding cliffs, Ramsar listed mangroves and mudflats on Western Port, which is also the location of the Port of Hastings. A further feature of a Peninsula landform is the large number of short, sharp drainage catchments, where increased storm frequency and intensity create a very real risk of localised flooding. He said this compounds the risk on the coastal strip – so climate change impacts occur

both through sea level change and increased intensity of rainfall at the coast – and of course the risk of an overlap between storm/high tide and catchment flooding.

Allan Cowley said there was a high level of awareness of climate change in 2008 in the wake of Al Gore's film *An inconvenient Truth*, the 2007 Australian election campaign and the Garnaut Climate Change report 2008. The Shire also had something useful to share with the community - the results of a climate change research project led by CSIRO. The Shire developed a booklet on the research findings for distribution to all residents, titled 'Climate Change: What we are doing about it'. We decided to provide leadership and support on the issue, while acknowledging that we did not have all the answers. The booklet was distributed inside a special edition of the Shire's newspaper, Peninsula Wide. We put it inside a brown paper envelope with the words "Important Information Inside" in big, bold red letters. We also provided a poster with all dates and venues of the 12 Climate Change Conversation sessions.

Part of our engagement strategy included offering all attendees a Climate Change Show bag with items such as a shower timer, tap flow regulator, energy efficient light globe, and even a voucher for a \$30 compost bin. As the meetings drew closer, personalised letters were sent to all residents, advertisements were placed in local papers, posters displayed in shopping centres and even billboards placed at strategic locations around the Shire. Letters were also sent to all local service clubs, sporting groups and schools, encouraging them to attend the sessions, and promote them to their members, students and families. There were 12 sessions planned across the municipality, with each session tailored to a specific community.

The sessions providing an overview of local research, discussion on state and federal responsibilities, they also looked at actions the Shire was taking at a local level to adapt to potential climate change impacts. After an initial presentation by relevant expert officers, not the CEO or councillors, the meetings were opened to questions. The questions tended to be very local and personal, such as

- Will our house be flooded in future rainstorm events?
- Will our house be flooded by future sea level rise?
- Will we be able to get a permit to build on our coastal block?
- Is our house at high risk of fire, in the event of a bushfire?
- Will my ageing Mum be well cared for (by Council) in the event of a heatwave?

Why were the climate change conversations successful? The format worked well because it was genuinely interactive, driven by community questions/issues. The message - 'we value you, we value your input' was reinforced throughout. What have the climate change conversations achieved? At that time the community was anxious to have local information and direction – the Shire was able to provide that – and, at least begin to build resilience and outline what can be done to mitigate climate change effects. The climate change conversations confirmed that even though climate change is a global issue the community was keen to see local government in this space and providing leadership, which has given us confidence to move into the development of adaptation strategies.

Since 2008 we have developed a range of programs, including *Climate Change – get involved*, which is an ongoing program to encourage take up of energy and water efficiency measures by the community through our Eco Living Display centre. We have also developed:

- Heatwave Response Plan which is focused on ensuring the safety of the community during extended hot periods,
- Fire preparedness – implemented fire management plans for Shire bushland reserves and drainage, including an independent audit of some of the works completed; employed a fire education officer for the summer period; and undertook over 40 fire walk and talk sessions with the community
- Integrated Drainage Strategy – the Council has committed \$30 m over ten years to map and upgrade our drainage infrastructure for the potential impact of Climate Change. This will consider increased sea levels as well as inland flooding
- Integrated Water Management Strategy to help manage the issues associated with reduced rainfall. It is exploring opportunities such as access to more recycled water through the upgrade to the Eastern Treatment Plan

Through the Future Coast Project the Shire is involved in a Coastal Vulnerability Assessment for the Western Port Bay which will provide us with a greater understanding of the localised impacts of predicted storm surges and sea level rise. In fact, it has been relatively easy to move from consultation to at least planning and often action, on most other areas of climate change adaptation than has been the case with coastal adaptation.

It is fairly common knowledge that more recently the strong level of interest in climate change has waned – and to some degree that is reflected in a more recent consultation – PLAN PENINSULA – which was conducted last year. This involved 15 meetings across the Shire with focus group sessions and online access. While there is still awareness of the threats of climate change public attention has shifted back to the more immediate issues of management, conservation and infrastructure.

CONFERENCE DAY TWO – Tuesday 26 March 2013

TOWARD A NATIONAL COASTAL POLICY

Professor Nick Harvey is the Executive Dean of the Faculty of Humanities and Social Sciences at The University of Adelaide and one of the lead researchers in the CSIRO coastal collaboration cluster. He is also the President of the Australian Coastal Society. He told delegates he would be focusing in his address on integration of coastal management and sustainability, calls for national action on coastal management and policy and future directions and advocacy. He said the United National Conference in Rio de Janeiro in 1992 had provided an initial focus on integration, which was subsequently followed by attempts at a national integration framework in Australia in 2003 and then in 2006. The conference in Rio de Janeiro said that *Each coastal State should consider establishing, or where necessary strengthening, appropriate coordinating mechanisms ... for integrated management and sustainable development of coastal and marine areas and their resources, at both the local and national levels.* Linked to that is the notion of integrated coastal management and there are many internationally accepted models around. It is well recognized that if we move towards a better form of integration we move towards a better form of sustainable development.

In Australia there are problems with integration. There have been attempts to solve it, but there have been problems between states, within states, across the land sea boundary. He said there were problems with administrative boundaries, such as the boundary on the coast between

NSW and Queensland, and the administrative arrangements at the mouth of the Murray. When the mouth of the Murray became blocked in 1981 there were so many different authorities that nobody knew what to do. This is another example of lack of integration. He gave an additional example – of the extent of the responsibility for different authorities on the Victorian coastline, which have authority for different distances out to sea. They overlap each other and it is clear there is a real need for integration there, as there is in every state. One good example of best practice in integration was the Coastcare program, which involved all three levels of government being party to a Memorandum of Understanding. This is quite unusual. It also involved the community and it did some very good work. The Australian Government did attempt to do something in terms of integrated coastal management. It put together a management framework in 2003 and an implementation plan in 2006 with a number of specified priority areas, but it didn't work. He listed the reasons as a lack of government investment or commitment, a lack of ownership of the issues, a lack of incentive and leadership from the Commonwealth. Even though the NRM Ministerial Council endorsed it, it was largely ignored.

Turning now to sustainability – in Australia what we had was the Ecologically Sustainable Development policy which was developed for the UN conference in Rio de Janeiro. This was really about using and reserving the resources so that we retain biodiversity and preserve it into the future. What's important about this policy is that since 1992 all of the environment policies and the coastal policies since then incorporate the basic principles. So what does this mean for coastal management? In the book that I wrote with Brian Caton we identified six principles as follows:

1. Use of coastal resources to safeguard for future generations
Maintain & enhance natural capital (e.g. pristine coasts, clean beaches, unpolluted waterways); Avoid over-exploitation of coastal resources; Minimise waste in coastal environments
2. Protection of coastal biodiversity and ecosystem integrity
3. Net community benefits from implementation of coastal proposals
4. Social equity through public participation in decision making
5. Reflection of full environmental costs in coastal resource use
6. Caution with environmental risk such as vulnerability and erosion

The relevance of this for coastal management is that the principles underpin the Commonwealth Coastal Policy, which came out in 1995, and also the Oceans Policy in 1998. It is important to note that these are Commonwealth policies, not national policies. There is also a lot of national coordination that influences coastal management, for example:

- Intergovernmental Agreement on the Environment (IGAE)
- Council of Australian Governments (COAG)
- Natural Resource Management Ministerial Council (NRMMC)
- Local Government and Planning Minister's Council (LGPMC)
- Intergovernmental Coastal Group (ICWG, ICRG and then ICAG)
- Environment Protection and Biodiversity Conservation Act (EPBC) 1999
 - focus on matters of national significance
 - decision of Commonwealth Environment Minister based on ESD approach
 - 2012 threats to delegate EPBC powers to states?

At the state level we have a number of coastal policies or strategies that are underpinned by the principles of sustainability, for example, the NSW Coastal Policy 1997, the Victorian Coastal Strategy 2008, which is currently being re-written, and the Queensland State Coastal Plan, part of which has been revoked and changed. Professor Harvey said that in the states and territories there are various elements of sustainability, either with dedicated coastal legislation or statutory policy, such as the following:

NSW

- *Coast Protection Act* 1979
- Coastal Policy (sustainable future) 1997
- Environmental Planning and Assessment Act 1979
- State Environmental Planning Policy 2002 NT
- No dedicated coastal legislation
- 85% coast under Aboriginal ownership
- Coastal Management Policy 2001 not released (non-statutory)

QLD

- Coast Protection and Management Act 1995 (amended 2003)
- Sustainable Planning Act 2009
- Queensland Coastal Plan 2011 and SPP 3 (under review 2012-13)

SA

- Coast Protection Act 1972
- Living Coast Strategy (non-statutory)

TAS

- No dedicated coastal legislation
- State Policies and Projects Act 1993 (includes sustainable development)
- Tasmanian Coastal Policy 1996 (under review since 2004)

VIC

- Coast Management Act 1995 (amended 2003)
- Local Government Act 1989 (includes sustainability)
- Victorian Coastal Strategy 2008 (being re-drafted)

WA

- No dedicated coastal legislation
- Planning and Development Act 2005 (includes sustainability)
- Draft Coastal Zone Management Policy (2001) not released

Where does that leave us in terms of sustainability? If you look at the six principles I outlined earlier:

1. Use of coastal resources to safeguard for future generations – Most states except NT
2. Protection of coastal biodiversity– Most noticeable in Vic, Tas, and SA
3. Net community benefits - Only evident in Victoria
4. Social equity through public participation in decision making – No explicit in any state
5. Reflection of full environmental costs in coastal resource use – Not explicit in any state
6. Caution with environmental risk – Most prominent in SA, Vic, NSW and Qld

Professor Harvey then turned to the next section of his address – national calls for action. He said there have been more than 30 different national inquiries and listed the key ones as follows:

2009 House of Representatives *Managing the Coast in Changing Climate*

1993 Resource Assessment Commission *Coastal Zone Inquiry*

1991 House of Representatives *Injured Coastline*

1980 House of Representatives *Management of Coastal Zone*

If you look at the findings of the 1980 House of Representatives report you find the following:

FINDINGS

Vast number of competing users involved in coastal management

Decisions on the coast made on individual 'ad hoc' basis

No co-ordination of Commonwealth activities on the coast

RECOMMENDATIONS

Establish an Australian Coastal Management Council

Commonwealth together with the States to develop and promulgate national policies and objectives for conservation and preservation of the coast

If we turn now to the 2009 House of Representatives report we find the following:

KEY MESSAGE

National leadership needed in managing our precious coastal zone in the context of climate change

THEMES FOR RECOMMENDATIONS

1. International coastal governance (R 1)
2. Climate change science and coastal impacts (R 2-4)
3. Adaptation strategies and practices to promote resilience (R5-18)
4. Insurance planning and legal issues (R19-23)
5. Sustainable coastal communities and environmental impacts (R24-37)
6. Governance arrangements in the coastal zone (R38-47)

SELECTED KEY RECOMMENDATIONS

- An intergovernmental agreement on the coastal zone (R44)
- A National Coastal Zone Policy and Strategy (R45)
- A National Coastal Advisory Council (R46)
- A nationally consistent sea-level rise planning benchmark (R21)
- An intergovernmental agreement on the coastal zone
- A National Coastal Zone Policy and Strategy
- A National Coastal Advisory Council
- A nationally consistent sea-level rise planning benchmark

He said there was no nationally consistent sea level rise benchmark, and that in fact there had been a reversal of existing sea level rise benchmarks in NSW and Queensland in 2012.

Professor Harvey said that finally, he would address the future directions and advocacy. He said here was overwhelming support for national action on coastal management and the options to achieve this were to rely on federal government to act on results of its own inquiries and to involve the states together with federal ministers to push the agenda through COAG. He noted that lack of action from previous inquiries suggests that even with COAG involvement there is need for NGOs and local councils to lobby federal politicians. So what are the prospects? There have been moves towards better integrated coastal management, moves towards more sustainable and strategic planning, moves toward 'best practice' coastal planning, a focus on dealing with the sea change phenomenon, there is potential for national coordination of coastal management, and there has been a recent national focus on coastal management and climate

change. The reality is – there was a national focus on integrated coastal management in 2003-06 which started to fade, the Federal Department of Climate Change took the lead on coastal matters from 2005 to 2010, the bi-partisan national coastal inquiry 2009 provided a missed opportunity for reform, the Federal Environment Department has gradually lost its expertise in coastal matters, the change of state governments in NSW and QLD reversed coastal planning policies, cuts to the Federal Department of Climate Change posed a further risk to coastal expertise, and there is a current disarray in Federal politics which is not conducive to national coastal policy initiatives.

We now have the Coastal Advocacy Alliance, which this group has formed with other coastal groups, and I feel this is the only way to go, through COAG. The policy initiatives being promoted by the Alliance are:

- COAG Standing Council on Coasts and Climate Change
 - Identify national coastal management issues
 - Responsibility for developing intergovernmental agreement and national coastal commission
- Intergovernmental Agreement on Coastal Zone
 - As per recommendation 44 from House of Reps report
 - Link state/local benchmarks to Commonwealth coastal funding
- National Coastal Zone Policy
 - As per recommendation 45 from House of Reps report
 - Implemented by National Coastal Commission supported by dedicated legislation and coastal information system

RETAINING COASTAL CHARACTER

Cr Pat Chigwidden, of the City of Victor Harbor, presented the first part of the session on the values and character of coastal communities began by looking at the early history of the local area on the Fleurieu Peninsula. She told delegates there had been an historic encounter in 1802 between Matthew Flinders on *The Investigator* and Nicolas Baudin on the *Geograph*. It was a friendly encounter, despite the fact that their two countries had been at war for a number of years. This meeting had been commemorated by naming the meeting spot Encounter Bay. The French connection had been commemorated by naming the region Fleurieu Peninsula. The first whaling station was established at the present site of the Whalers Inn, at the Bluff, which is now popular with visitors as a local viewing spot. The first European settlers in the area arrived in 1839. They moved to the region at the suggestion of Governor Gawler and took up local land holdings at a price of one pound an acre.

Whaling provided the main source of income for the area until the 1860s, when bigger profits were to be made from the wool and wheat trade, which was being transported down the Murray-Darling river system to Port Goolwa. The large ocean-going clippers could not negotiate the mouth of the Murray, so in 1854 one of Australia's first railway lines was opened between Goolwa to Port Elliot to deliver the wool to the ships, however Horseshoe Bay proved to be too shallow and too rough, with seven ships being wrecked between 1853 and 1864, so the horse-drawn railway was extended to Victor Harbor and across the harbor to Granite Island. The railway line meant that by 1880 some 25,000 bales of wool were being transported annually down the Darling and Murray river system to the port of Goolwa. The old wool store in Victor Harbor is now being used as a Whale Centre. By the 1890s the establishment of Victor Harbor as a holiday resort had begun. Some 40% of the home in the area are now holiday homes. When

the first visitors arrived in the area more than 100 years ago they arrived by fishing and whaling boats.

Today, the continuing improvement in our road system is encouraging people to live in the Fleurieu region and commute to Adelaide to work. While a large percentage of local residents are older people they make a major contribution to the local community through their work as volunteers. The area has a number of very active community organisations including two Rotary Clubs, a Lions Club, a Zonta Club, many sporting clubs and a bowling club with more than 1000 members. The local facilities include a good hospital, three quality nursing homes, a variety of retirement villages and some excellent schools.

Mayor Kym McHugh, the Mayor of Alexandrina, Deputy Chair of the National Sea Change Taskforce and President of the Local Government Association of South Australia provided delegates with background information on Alexandrina Council. He said the growth rate in the council is five times the State average for South Australia. Agriculture is the largest local industry sector. He showed a video which featured a number of highlights of the region. He said the area had a wide range of traditional farming activities, such as dairy, sheep, cattle, growing cereals, legumes and oil seeds, horticulture and a large area of local land was given over to viticulture. Kym said the Alexandrina Council has a strong commitment to the agriculture sector and aimed to protect agricultural land and the community's heritage buildings from the pressures of residential growth. He said in 2008 the council had developed a Rural Area Strategy and Action Plan and had worked with the local community to ensure a strong and sustainable future for farming in Alexandrina. It led to the establishment of the Alexandrina Sustainable Agricultural Round Table, which helped to implement the strategy by providing advice to assist the council develop appropriate planning policies. The Round Table includes representatives of the various agricultural industries in the area and includes elected representatives and officers of the council. He introduced Sally Roberts, who is the executive officer of the Round Table.

Sally Roberts, the General Manager of Environment and Development Services with Alexandrina Council, said her presentation would walk delegates through the townships of Port Elliot and Goolwa. She said the focus on heritage started back in 1987, when Goolwa was declared the third state heritage area in South Australia. In the early 1990s the Council and the State Heritage Branch commenced the Heritage Advisory Service, which meant that council and the community had access to qualified heritage architects that could provide free advice to people who wanted to undertake restoration work and renovations. In the same period the council recognised the importance of not only the heritage buildings and areas that had state significance but also those that contributed locally, in particular within the township of Port Elliot. Council proceeded to prepare planning policy that would introduce historic conservation zonings to the council development plan, which sets out where development can occur and the type of development that can take place. The Heritage Advisory Service was expanded to ensure that those people within the local heritage areas could access the free advice.

Over the 20 or so years since then we have been able to protect some special and unique parts of our townships and that has not been without some challenges. One of the key drivers of character retention has been having a vision and a commitment to ensure that it is maintained. We have been fortunate to have some visionary people within our council who have helped to keep this going over an extended period of time. Once you have the vision you can lock that into your strategic plans and thereby provide some guidance to the other plans that come within

that. Also, it commits your community and councillors to that vision. It means the vision is not just about the buildings but also about the streetscapes. As a planner you need to be engaging with not only the landowners and developers but also with engineers and public infrastructure personnel who can have an impact on the character, particularly through footpaths, kerbing and other similar items.

Sally Roberts showed delegates a video of the historic townships of Port Elliot and Goolwa. She highlighted elements such as the street furniture and the footpaths, which were determined to be in keeping with the heritage character through a streetscape plan, which was produced following extensive consultation with the local community. She said there had been a debate about whether retaining character had stifled development, and noted that although the population in the southern towns had increased by about 20% since 2001 the modern, large new buildings had been located away from the core historic areas. She said the townships had been separated by retaining open farming land in between. She said Goolwa is one of two main centres in Alexandrina, together with Strathalbyn, and pointed out that the approach taken to retaining character in the area had been expressed by Edward T McMahon of the Conservation Fund in the United States as follows:

'Growth is inevitable and desirable, but destruction of character is not. The question is not whether your part of the world is going to change. The question is how?'

The program to retain heritage character has been great but there have been challenges. We have had to cope with rapid population growth, which has placed a lot of pressure on council. There have been changes to State Government policy that can impact on local heritage, and there has been some discussion about how much emphasis should be placed on heritage buildings if it is detrimental to new development. We have been able to maintain a strong policy with our Development Plan through zonings and local heritage listings. We have maintained the Heritage Advisory Service, despite the fact that the State Government has pulled funding from the service. We have also established a Heritage Advisory Committee, which provides small grants to owners of heritage buildings to assist them with small projects to retain or improve their properties, and every two years we have an awards night where we recognise the work these property owners have undertaken. The council has been committed to maintaining the focus on heritage retention and been prepared to take legal action when necessary. It has also been prepared to take the criticism about heritage stifling development.

In conclusion Sally said it has taken a clear vision, commitment and recognition of what makes the character of the town to make the program work. But heritage is just one of the elements that define the character of a town. You need to find out what makes your town unique and look at how you can capitalise on this and importantly you need to bring your community along with you because they will be your greatest allies if things start to get tough.

VALUES AND CHARACTER OF COASTAL AUSTRALIA

Dr Garry Middle is Course Coordinator, Department of Urban and Regional Planning at Curtin University in Western Australia. He was formerly a planner in local government and he has recently commenced a research project which has been commissioned by the National Sea Change Taskforce together with four West Australian coastal councils. The project is aimed at developing a methodology and planning tool to capture and document coastal values and character in coastal communities. Garry Middle told delegates that character and values are

intrinsically subjective. When you make choices about what to protect and what is character, inevitably it is subjective. He said what is being done in the study that is currently underway, which involves four West Australian local government areas, is to broaden the notion of character. The methodology is to document values and character and apply them to the councils involved – Augusta-Margaret River, Harvey, Mandurah and Rockingham. The four case study communities are Shoalwater Bay in Rockingham, Falcon in Mandurah, Australind in Harvey and Flinders Bay in Augusta-Margaret River. They are quite different.

Shoalwater Bay is bordered by the coast and Safety Bay Rd., which is a busy road, and it sees itself as being different. It has a family oriented beach, an offshore marine park, kite surfing and wind surfing, and there are a range of housing styles – from older buildings up to 70s style flats and more modern double storey buildings. Falcon used to be an isolated coastal community which is now surrounded by residential development. It has a north-facing beach and quality housing. It was formerly a holiday resort and there is only one commercial development – a café on the foreshore. Australind is north of Bunbury, and this is different because it is an estuarine settlement. There is a large-lot rural subdivision to the north, with a special residential area to the south. There is quite a mix of land uses and it has experienced rapid change over time. Flinders Bay is a small settlement of about 40 homes near Cape Leeuwin. Less than half of the houses are occupied permanently. The housing ranges from old beach shacks to more recent buildings. Our methodology is mainly based on qualitative research. We look at a range of data and look for common themes. The closest that we come to quantitative research is an intercept survey of beach users. We ask them what they do at the beach, how they value it and a generalized view of character using photos. We also asked the residents to do a photographic survey together with in-depth interviews.

We asked people to rate the beach on a scale from 1 to 10 in relation to a series of values, including ecosystem, commercial economic, personal economic, fishing, land recreation, water recreation. As you can see people indicated that they did not rate economic aspects very highly, which is interesting because from the point of view of their personal economic circumstances, living near the beach is valuable. They are saying that they rate the ecosystem highly, wilderness also scores highly. As you can see, Shoalwater Bay rates low in terms of commercial things. We showed people a series of photos. People said canal estates were out of character, no surprises there. Wilderness rated highly. Those places with caravan parks rated them highly. Areas without out them did not. Jetties and boats rated highly in areas that had them and not so highly in other areas. This started to give us a sense of what people believe is out of character. One of the most interest parts of the study has been the photo surveys. We asked people to take photos of what they believe represents the character of their coastal community, including the beach. This did not work so well, so we took photos ourselves and asked people to rate them at a sausage sizzle that we held at the beach. We also asked people to comment on why they liked the things that they did. Then we set about drawing some meaning from the information people had given us. The beach itself rated very highly as representing the character of the place, and the built environment. Human uses, such as families using the beach, dog walking, kite surfing and wind surfing, also rated highly. It is interesting to note that the sense of place people identified about the built environment was often as much about the people they knew who lived in a particular house as the house itself. The houses that were identified as being most in character were the old shacks. That is an issue for local government – how do you deal with the old shacks? People see double storey houses and units as being out of character. So, the challenge for councils is going to be finding a design that is in character with

the location. The type of standard brick home, which is now being built in coastal areas, is seen as being totally out of character. People believe the best place for these houses to be is several streets back from the beach. Garry Middle said the research team will now complete work on the Shoalwater Bay and the three other case study areas and then make a formal presentation to each of the councils involved. Copies of the report will then be made available to the National Sea Change Taskforce.

AUSTRALIA'S EXTREME WEATHER EVENTS: A SIGN OF THINGS TO COME?

Dr. Rob Vertessy, is the Director of the Bureau of Meteorology, having been appointed to this position late last year. He was formerly head of the Bureau's Climate and Water Division. He delivered a keynote address to delegates on the significance of recent extreme weather events. Dr. Vertessy said that following the remarkable summer the question on everyone's lips is whether the extreme weather events were likely to become more common in the future. He said he would outline the weather events over the past decade. He said there were good weather records going back at least 100 years so we know that we live in a naturally variable climate, with droughts, fires and floods all being experienced.

Dr. Vertessy said during the last decade Australia has experienced the driest season and the wettest season only four years apart - the millennium drought, which peaked around 2006 - and the La Nina years that followed. The drought is now considered the deepest most prolonged drought since the Federation drought a hundred years prior. He noted that one of the interesting things observed even during La Nina is that it did not lessen the drier conditions experienced in southern Australia notably during autumn and winter. He said he would consider the events that flowed from the conditions over the past decade, including the catastrophic impact of the Black Saturday bushfires. He said that during the summer of 2009 the temperatures were more than 6 degrees above normal, and on Saturday 7 February they were more than 10 degrees above normal with strong winds and a desiccated landscape. Not long after that, conditions in the Pacific changed to the La Nina conditions, which were conducive to a lot of cloudiness and rainfall. As a result, Australia experienced the two wettest years on record, with records extending back more than 100 years. We also had record warm ocean temperatures and the largest and most powerful cyclone ever to cross the Queensland coast. Darwin had its wettest day, week and month. Brisbane received double its average rainfall. There was also very extensive flooding in Victoria from November to February. We also had extensive flooding on the west coast at Carnarvon in December. The only area not affected was the south west, where the pattern of very little rainfall continued. At that time it had experienced the driest year on record and some periods of extreme heat.

He said the floods were truly remarkable. There was major flooding in most of the states. During that period we had 2,200 warnings and watches compared to about 300, which we would normally have. There were around 100 weather records that tumbled and the Queensland flood warning centre during the period was operative for 241 days out of 250 days, which is very unusual. The centre would normally operate for between 20 and 30 days a year. So the Bureau was kept busy as the community experienced these really difficult conditions. No sooner was the La Nina over than we swung back to neutral conditions, which made the heatwave in January this year all the more remarkable. The conditions in the Indian and Pacific oceans were not particularly conducive to extreme temperatures other than the well above average sea surface temperatures. Seventy per cent of the continent reached a temperature of more than

42 degrees during this event, and at Moomba, the temperature reached 49.6 degrees. We also attained the record average continental temperature of 40.33 degrees. The prior record was 40.1 degrees registered in 1972. What was particularly unusual was how prolonged this heatwave was. We had seven days where the maximum temperature exceeded 39 degrees averaged over the continent and 11 days where it exceeded 38 degrees averaged over the continent. This was absolutely off the charts. Shortly after that we had a cyclone form in the Gulf of Carpentaria. It started as a tropical depression and attained a category 1 level when it crossed Cape Yorke Peninsula. It quickly broke down into an ex-tropical cyclone and what looked like an ordinary tropical depression that had very significant energy, and came down the east coast of Australia causing all kinds of havoc. We had torrential rain, peaking at Tully in Queensland which had a metre of rain in three or four days, with some 642mms falling in just 48 hours. We had extensive flooding right along the east coast. Unfortunately, some deaths were recorded and quite a lot of infrastructure was knocked out, including communication infrastructure used by the Bureau.

I've spoken about some unprecedented extreme weather events, literally hundreds and hundreds of weather records were broken over the past decade in Australia. We now need to ask the question: was that just bad luck or is there something systemic going on that is increasing the odds of that sort of thing happening? First, there is absolutely no doubt that we have a serious global warming problem on our hands. It just isn't a few measurements of temperature sprinkled here and there. It is a whole raft of different climate indicators – changes in air temperature at both ground level and in the troposphere, changes in ocean temperature – in the water and above the water – changes in snow cover, glaciers, permafrost, sea ice – these are all pointing in the same direction. The globe is warming. The cryo-sphere is melting, the oceans are warming up as is the atmosphere. Patterns do vary around the world. In fact you will find places that are getting colder, and the rates of warming are changing, but overall, the average trend over the globe is very clear and is getting quite serious. If we look at Australia's air temperature over the last 100 years we can see the change in temperature decade upon decade. This is shown as a deviation from the baseline set between 1961 and 1990. You can see that decade after decade Australia's air temperature has been warming. There is a very significant signal there and it is not dissimilar to what we see in the rest of the world. This graph shows that the increase in minimum temperature is about 0.7 degrees over the last 100 years. The pattern is not uniform, it is greater in some areas. The pattern for maximum temperature shows that this increase is more than one degree, and finally the average daily temperature is just under one degree. This is a clear signal that the atmosphere is warming. One fascinating aspect of the change is the distribution of temperature. This graph shows the change in the number of records of daytime and nighttime highs and lows. This is showing the number of records that have been broken over the past 100 years and you can see the hot records both at nighttime and daytime are going up and the cold records are all going down. It is a clear signal.

Looking at the distribution of temperatures, if you take every day's temperature that was ever measured and plotted it in a frequency distribution you will get this characteristic bell-shaped curve. What is happening is the entire distribution of temperatures is moving to the right, into the warmer zone. What is significant about this is the temperature extremes that are changing very significantly. A one degree rise in temperature may not seem a bad thing, but what is problematic is how the extremes change, particularly the high extremes. What this shows is how frequently a one standard or two standard deviation weather event is exceeded these days. You can think of a one standard deviation event as a pretty hot day. A two standard deviation event

is a sweltering hot day. When we were kids a 2 standard deviation event would happen about 2% of the time. They now happen 10% of the time. So those extreme weather events are now five times more likely to occur, and that trend is continuing.

Turning now to the oceans - we see that sea level rise globally has been about 21cms since the industrial revolution. It is currently increasing at about 3.2mms a year averaged over the globe and accelerating. There is considerable variation around the world and around Australia. Very accurate measuring systems show that the increase is greater in the north of Australia than in the south. This is affected by the rather complex dynamics of changing pressure systems around the world, changing patterns of sea surface temperatures which are associated with El Nino and La Nina cycles. The point to make here is that there is a very steady background signal but quite considerable spatial variation and on top of that the ocean has warmed as well. There has been very significant warming of the ocean and the graph of this is similar to the graph we saw for air temperature. There has been decade upon decade warming of the ocean with about one degree of warming over the last century. What is particularly alarming, however, is the growing heat content of the ocean. The greenhouse effect is basically a blanket over the world, which allows radiation to come in and less to escape. Prior to the industrial revolution the incoming and the outgoing radiation were more or less balanced – the Earth was neither warming nor cooling. Since we've created a carbon dioxide and associated greenhouse blanket there is a significant amount of energy being stored underneath the greenhouse blanket. It is so much it is the equivalent of about 20 times the total energy production of humanity. That is the rate at which it is accumulating. Over 90% of that is being soaked up in the ocean and what this graph is showing is the growing heat content of the ocean – something that none of us can feel, but it is actually a very dangerous problem because it would lock in temperature rise in the atmosphere for centuries. They may not be particularly high, but a locked in pattern of sustained higher atmospheric temperatures than normal.

Next, we turn to the projections, to try and draw a line between some of the things that we have seen in the weather patterns of the last decade and some of the systematic underlying changes I have spoken about in terms of climate change, bearing in mind that everything I have shown you today has been observed: none of it is predicted. I am now turning to projections, with which of course there is always going to be some uncertainty. The mainstay of climate projection is numerical weather prediction. These are the same type of models we use to predict the weather out to seven days. This is one of the world's leading models from the European centre for medium range weather forecasting. Here in Australia we run a similar system. These numerical weather prediction models and the models we use for climate projection have very high fidelity. They are able to simulate the pattern of weather and climate events. An important thing that needs to be said is that these models when you use them for climate projections out into the future for multiple decades, out to the end of the century, can be relied on to get the trend right. The analogy is if we take a hammer and we hit a vase with it we know the vase is going to break. Where we have less certainty is where the shards might fall. In a climate context, the analogy is which parts of the globe are going to get warmer and which parts are going to get wetter and drier. So, we talk about the uncertainty cascade, because there are quite a few unknowns when you are trying to project into the future and imagine what it is going to look like. You have a number of uncertainties. The first is we can't be sure what the carbon dioxide emission trajectory is going to be. Second, we are still learning about the carbon cycle and the amount of carbon that gets sequestered into different components of the global system, namely the atmosphere, the land and the oceans. There is some contention around the

sense of global climate sensitivity – that is, how much temperature rise you get for a particular incremental rise in carbon dioxide. We are even less sure now about the scale of change at the continent scale, even more uncertain at the regional scale, and we are starting to make quite informed guesses about what it might mean at the local scale. What is clear is that carbon dioxide emissions are going to rise at least until mid century. This is based on global carbon dioxide output estimates from different parts of the world. It is basically from everything we can surmise from investment in fossil fuels, which is locked in for a 20 to 30 year cycle.

There are all kinds of variables that are put into a climate change projection and all of them have one thing in common – an assumed carbon dioxide increase or decrease trajectory. What I am showing is a middle of the pack projection of carbon dioxide increase. It is by no means an extreme or optimistic pattern. This shows that a level of 450 parts per million of carbon dioxide equates to a 2 degree rise in global temperature. This middle of the pack projection has us attaining 450ppm by about 2026 with a 2 degree rise in temperature by 2040, which is only 27 years away. Two degrees centigrade is agreed by the international science community as a so-called ‘safety guardrail’. Once you get beyond that point there are a whole lot of positive feedback effects which could dangerously accelerate climate change and possibly make it irreversible, no matter what we do with emissions control. So a lot of attention is focused at the moment on trying to keep the planet below two degrees warmer noting that it has already risen by one degree. What does a two degree warmer Australia look like? Winter temperatures are displaced to the north, and summer temperatures are displaced to the south. And for rainfall we see in winter a lot of northern Australia is considerably wetter but most of southern Australia is drier, and in summer again we see that southern Australia is quite a bit drier. In that 2 degree warmer world, which is only a quarter of a century away, central Victoria starts looking like the Wimmera. These are the kind of biophysical shifts that we can expect accompanying that degree of climate change. If we continue on the business as usual trajectory up to the middle of the century and beyond we’ve got some serious issues on our hands. There is a wide variety of sea level rise projections depending on what carbon dioxide projections you consider, but in the broad they will have sea level rise anywhere from half a metre up to a metre depending on how bad the emissions are. Again, there is significant spatial variation around the world. In Australia, half a metre doesn’t sound like a huge amount, but what is very important is what happens then associated with storm surge. There is a non-linear effect between mean sea level and the probability of inundation, so there are some real risks for any infrastructure along the coast.

I want to end by knitting together weather and climate. Climate change in itself is a problem but it is a particular problem for weather because it is intensifying the hydrological cycle. For every degree rise in temperature there is about a 7% increase in the moisture holding capacity of the atmosphere. Since the industrial revolution began we have already increased the amount of water held in the atmosphere by 4% so that means 4% more rainfall. The more we warm the planet the more water will be held in the atmosphere, the more energy there will be, the stronger the winds, the more intense the rainfall and there will also be shifting patterns in the pressure systems. Generally, we will see a lot more rain in the tropics and we will probably see less in the sub tropics. Areas like southern Australia are very likely to have much more stable high pressure systems which will tend not to bring rains. So this part of the world will be subject to more severe and prolonged drought, but we will still be susceptible to occasional intense rainfall, most likely associated with monsoons coming down the north west corridor of Australia, as we have seen over the last few years. That intensification of the hydrological cycle is what links climate change together with changing weather conditions.

In summary, by any measure the extreme weather events of the last decade have been extraordinary. There is nothing like it on the record. Granted we only have high quality eather observations going back a century to the statistical analyses on, but a lot of the paleo-climate work that has been done makes it clear that the 20th Century is probably the warmest in the last 10,000 years. Twenty of the past 25 years have been the hottest on record. Significant global warming has occurred already and it is definitely going to get worse. To what extent it gets worse will depend on the global policy settings and whether or not we arrest carbon dioxide emissions. That is going to lead to further intensification of the hydrological cycle and that in turn will require us to have well-crafted adaptation responses to more heatwaves, fires, floods and storm surges on the coast.

DISASTER RESPONSE AND RECOVERY

This session considered how three local government areas were affected by extreme weather events in recent years. The role played by local councils is critical responding to a natural disaster such as a bushfire or flood.

Annie Riordan is Director Corporate and Community Services with the Augusta-Margaret River Shire, which is located in the south-west region of Western Australia, some 270kms south of Perth. It was here, in the Margaret River area, that a disastrous fire broke out on 23 November, 2011, causing extensive property damage, and taking days for emergency services to bring under control. Annie Riordan, told delegates what impact the fire had on the local council and residents. She said the Augusta Margaret River region is an area that is highly vulnerable to bushfire. She said following on from the previous presentation I is obvious that changes to the climate will provide an environment where there is an increased likelihood of bushfire occurring. There has been a long-term trend of decreasing rainfall in the south west of Western Australia – a decrease of about 10% since the 1970s. That decrease has been accompanied by an increase in extremely dry easterly winds which provide conditions that increase both the intensity and the rate of spread of bushfires which makes them more difficult to control.

The Margaret River bushfire of November 2011 was the result of a prescribed burn undertaken by the Department of Environment and Conservation at Ellensbrook, about 13km north west of Margaret River. The prescribed burn, which was thought to be extinguished, re-ignited and escaped, developing into a wild fire that took more than five days to get under control and which destroyed 40 houses in its path. The fire travelled about 20kms south from Ellensbrook, along the coastline. There were many rural properties in the area, and it this peri-urban environment which makes the fire particularly difficult for the Department of Environment and Conservation and fire fighters to control. There is only one access road into the area which means that evacuation by sea had to be undertaken to rescue trapped residents. There was widespread environmental damage where the Margaret River meets the sea and a loss of biodiversity from which the area is struggling to recover. There were almost 3000hs of land burns, 40 homes totally destroyed, many more partially destroyed, but fortunately no loss of life. The event had a major impact on local business and tourism, which experienced a decline of about 50% over the summer of 2011-12. The welfare centre was staffed by the Department of Child Protection, Red Cross and Shire officers. They were supported by many volunteer groups such as Lions, Rotary and some commercial operators. One of the issues faced by the Shire was how to deal with the many donations that were received. These were forwarded on to the Lions Club which organized distribution.

In West Australia local government is responsible for the recovery process. The Shire established a bushfire recovery group. The Premier donated \$40,000, and we received funding for a bushfire recovery officer for 18 months. We were also lucky to have the services of an officer of the Department of Child Protection for 12 months, which helped with identification of people at risk. We also offered counseling to Shire staff. A lot of blame was laid with the Department of Environment and Conservation and the State Government acknowledged responsibility for the blaze. A State Government assistance scheme was announced for people who had lost property. The Office of Bushfire Risk Management was established and this Office will be responsible for prescribed burns. The State Government has advised that it will soon mandate establishment of Bushfire Risk Management Plans for each local government area. The government has also announced a Capes Enhancement Program with funding of \$7 million over 4 years for enhanced emergency services in the Capes Region, including new Gazetted fire districts and training for bushfire brigades in breathing apparatus and structural fires, enhancement of two new multi-agency Incident Control Centres at Margaret River and Busselton, and Funding for additional staff and additional fire fighting appliances. The Shire response has included Bushfire Prone Designation, improved Fuel Hazard Reduction and Firebreak Notice, Emergency Contacts, construction of an SES facility with enhanced facilities, and training of Bushfire Brigade Volunteers to use breathing apparatus.

Cr. Peter Flannery is an elected representative of the Moreton Bay Regional Council in Queensland, and a representative of that state on the Taskforce Committee of Management. His presentation highlighted the damage inflicted by ex-tropical cyclone Oswald in January 2013. He began with an outline of the Council. He said the population of the local government area was 389,661 and the municipality had total operating expenditure of \$389million. The municipality had a coastline of approximately 11kms including rocky cliffs, sandy beaches and mangrove mud flats. There were numerous low-lying communities along the length of the coast. Recent disasters in the area included a major oil spill in 2009, from the Pacific Adventurer, when 270 tonnes of heavy fuel oil was lost into the sea, requiring a massive clean up which took 2 months. The 2010-11 floods brought heavy rain from tropical cyclone Tasha, which combined with the peak of a La Nina event to cause local damage.

Ex tropical cyclone Oswald in January 2013 generated damaging winds, heavy rain and strong waves along the coast, which caused flooding, significant erosion and loss of power for many areas for seven days. The extreme weather event tracked SSE inland from the coast over the Australia Day weekend. There was a maximum storm surge of about 0.8m in Moreton Bay about 0.5m above the highest astronomical tide. The maximum wave height outside Bribie Island was about 6 metres. Wind gusts of up to 128km were recorded at nearby Cape Moreton and 95km at Redcliffe on 27 January. Average rainfall on 27 January was 185 mm, with a maximum of 447mm at Mt Nebo. The cost of emergency and recovery repairs has been estimated at \$3.2m, plus the cost of significant rehabilitation and repairs were estimated at \$14.7m. The total cost to Council is estimated at \$17.9m. Peter Flannery said the areas most affected by the ex-tropical cyclone were Woorim Beach, Bribie Island, Scarborough, Margate and the Beachmere Foreshore.

He said council strategies to minimize the risk included modeling the risks through storm hazard studies, flood mapping and climate projection. Other strategies included reducing exposure to risk through the planning scheme, shoreline erosion management plans and capital projects, and increasing community awareness of the risks through community education campaigns,

flood maps of suburbs and flood check property reports. He said the lessons learned from the disasters were that council needed to have the capacity to respond effectively to extreme weather events; community preparedness is essential; and there is a need to plan for the prospect of consecutive disasters. The challenges were – managing existing community areas exposed to risk; uncertainty in relation to State and Federal Government coastal planning; managing the budget, resources and community impacts of consecutive extreme events; and funding ongoing adaptation responses.

Cr. Michele Higgins is an elected representative on the Kingborough Council in Tasman. She is also a Tasmanian representative on the Taskforce Committee of Management. She said she would provide an outline of the impact of the Tasmanian bushfires of early 2013 and the role of the social media, which she said needed to be seriously considered. She said she would be focusing on the events around 4 January when the temperature reached 41.8 degrees, the highest temperature ever recorded in Tasmania since records commenced in 1882. There were 40 fires, with some of the worst affected areas in the south east of the state around Port Arthur and the two peninsulas south of Dunalley. It is worth noting that there is only one main access road and that this time of the year is the height of the Tasmanian tourist season. The damages were estimated by the Insurance Council of Australia at more than \$42 million, including 25,000hs of land burnt, 415 buildings lost, hundreds of kilometres of fencing, and a Victoria volunteer bushfire fighter died following a heart attack. A lot of people sought refuge by the waterline and had to be evacuated by ferry. There were a number of commercial operators who were able to do that. They were taken to emergency centres in Hobart, plus centres at Sorell and on the Tasman Peninsula. Oyster farmers of the east coast estimate their losses at \$3 million alone, and up to 250 other businesses were either directly or indirectly affected. It is interesting to note that tourism operators anticipate a decline in business of between 10% to 15% for six months, which is why the State Government is currently promoting tourism on the mainland. Then there were the insurance impacts. The Insurance Council of Australia estimate that only 50% of tourism operators were covered for business interruption, and if you look at small business, only 5% had cover.

Michele said what she wanted to focus on was the social media and technology dimensions of the event, which had an amazing level of interaction with the disaster. The response was of huge benefit. People wanted to be involved and they wanted to help, which we also saw in the Queensland floods when people came out with their brooms to help clean up the mess. The message for today is about the importance of communication in these circumstances. There was official and accurate information available through sites run by Tasmania Fire Service and other emergency services, which was constantly being updated. Getting accurate information out there is important at times like this pointing out the 'no-go' areas, for example, particularly if you have a single road in and out of an area and it becomes blocked off. The Tasmania Fire Service used the alarm system to target mobile phones in the affected areas and that was of great benefit. There was also a rapid public response aimed at supporting emergency personnel, such as making meals, cups of tea, and making donations. Shortly after the fires had affected the peninsula one woman in Hobart set up a Facebook page and asked people with yachts to meet at Constitution Dock together with people who wanted to donate things. Within 24 hours there were about 30 yachts sailing down to deliver goods into the affected areas. Something this also showed is that it is important for people to have the opportunity to express what they are going through, which improves their capacity to heal. It was of real benefit if you were fundraising.

But there is also a downside. We saw unofficial Facebook pages springing up that weren't authorized or accurate. Someone would say that I got through on such and such a road – you'll be OK. We had someone go into a butcher's and buy \$200 worth of meat to donate, then found themselves stuck in a traffic jam for six hours in extreme heat, only to find at the other end that the meat couldn't be used. Or you found police being abused because someone had said you could go down such and such a road when you couldn't. It got to the stage where people were using unauthorized channels and there some bad decisions made as a result. For instance, someone had put up a notice on a web site that petrol was needed. So a woman in Hobart went to her local petrol station and filled up canisters with petrol, put them in her car and drove to the Sorell Council offices. She nearly collapsed when she got there after inhaling all those fumes, and when she arrived she found that the road had been opened for two days and the tankers had been in there. This is the sort of thing you need to be ready for. When you look at using social media you are relying on electricity and transmission infrastructure. But if that goes down the information will not get through. The other thing that happened was there was an avalanche of some goods. Everyone decides they'll get on Facebook, or Twitter or a web site and the level of traffic causes a bottle neck which can't cope with the level of response. Also, you need to remember if you are trying to contact people through their mobile phones they may not have their chargers with them. You have a situation where someone might post a message that incontinence pads are needed. The next thing you know a pallet of them will arrive. Or someone said that there was a need for bras, and someone sent 200 of them, all the same size. Sorell Council had about 700 people that needed to be clothed, so they sent out a call for assistance and ended up receiving enough clothing for 35,000 people, which they are still trying to sort out. The Salvation Army has said that if you can provide people with what they need for two days, and give them \$1,000, they will be able to cope and it will also be a psychological boost.

What we found is that there were bakeries that were cleared out because people would go and buy up all the stock to try and help. But there was nothing left for emergency services people to eat. Our challenge is to try to harness all of goodwill of people. The worst thing possible is the inaccurate information that comes out. In my own community I know that people rallied to help and raised donations and formed groups to go and do jobs like replacing burnt fencing and shifting stock to safety. My message today is that social media is something that is very new and it has huge potential. There are a lot of people who are prepared to help when there is a disaster, but the challenge is how do we find the best way of harnessing that so that we achieve good outcomes.

BUILDING SUCCESSFUL COMMUNITY SOLAR PROGRAMS

Richard Turner, founder of Zen Home Energy Systems, told delegates his company had been set up about ten years ago in Adelaide. Since then it had been identified by BRW as the fourth fastest growing company in the country. He said that after initially taking an interest in solar energy he saw the opportunity to engage local communities to address the critical issues within energy networks. This would provide an opportunity to address peak demand and reduce energy costs, to educate communities on reducing their environmental footprint and help to preserve our environment.

He said the previous Minister for Energy and Infrastructure, Martin Ferguson, had predicted that Australia will spend \$100 Billion on electricity infrastructure upgrades over the next 10 years. In the USA this could be 10 times more. He said centralised energy systems such as we have at the

moment, with large power plants and long transmission lines, will struggle to sustain future development. Distributed energy, which provides local, regional generation, is part of the solution to overcome this problem. Richard said the other challenges are growing peak demand, which means the energy system has to be designed with capacity to meet peaks, flat or declining demand in off peak periods, ageing or non-existent infrastructure, high cost of power transmission and distribution, unstable power networks, growing regional and remote communities, growing energy needs in developing countries, rising cost of electricity generation from fossil fuels, economic losses from supply interruptions, increased intermittent generation from renewables, rising uptake of demand for electric vehicles. At the same time countries such as Japan and Germany were moving away from nuclear power because of the perceived dangers involved.

Richard said a report last year by the Australian Bureau of Resources and Energy Economics had projected that by 2030 the four lowest cost forms of energy generation at the source in Australia will all be renewable: solar, solar thermal, wave and wind. The study concluded that 'Australia will experience an energy transformation over the coming decades that will have a profound impact for electricity networks, how energy is distributed and on Australia's ability to meet its targeted greenhouse gas emission reductions.' He said that as renewable energy is an intermittent energy source, the enabling technology for the large scale deployment of renewable generation will be the development of intelligent distributed energy storage, which would enable 24 hour base load consumption, or injection into the power grid. The global issue of peak energy demand could then be managed through optimisation of existing infrastructure by storing energy during low demand and making it available during high demand. This load shifting could be done in the home with residential systems or on the grid with large utility scale systems. He said the size of this opportunity is very large, with the market for distributed energy storage growing rapidly. In the USA alone it is forecast to reach between \$150-300 billion dollars by 2021. In Australia this is forecast to reach \$15-30 billion, which is in line with the Federal Government's forecast 10 year spend on grid infrastructure upgrades.

Richard said the market for solar energy generation in the USA by 2016 alone will be 30GW (\$60 billion) of installed capacity with Australia forecast at 3.5GW (\$8 billion) of installed capacity by 2016 and 10GW by 2021 (\$23 Billion). This shows we are only scratching the surface of the market at the moment. With distributed energy storage, countries such as India, China and Africa can lay down thousands of renewable powered micro grids without the need for hugely expensive cross country infrastructure and at a cost of energy cheaper than diesel.

He said Zen had been involved in the development of several solar councils community programs, which had a number of benefits for councils. These included: demonstration of community leadership by council; positive engagement with community; development and training of local skills to deliver programs; establishment of new local businesses. There was also an opportunity for an income stream to enhance program results, plus the council was seen to be making a contribution to renewable energy targets. Richard said the steps involved in establishing a successful program were conduct a community engagement strategy; call tenders for a solar supplier; communication with residents, such as a letter from Mayor mailed out with program details helped to generate positive response; the successful company takes care of the rest working very closely with Council to required performance criteria. This includes training mechanics to do the work, providing a website on the program which could be maintained by

the council or successful company or both; conducting community Information/education sessions; taking registrations of Interest; conducting home or business site inspections; providing a quote and undertaking installation and tracking program results.

He said the first community program began in Mildura in 2008 and had been initiated in cooperation with the Sunraysia TAFE. It was the first of its kind nationally and was relatively small, with solar installation to 30 homes. This was the company's first experience at engaging with a community and provided an indication of what could potentially be achieved through a wider community program. The next program was located in the Towong Shire Council area, in northern Victoria, in 2009. Officers at the council had a passion for sustainability and wanted to engage residents but didn't know how to go about it. Zen was engaged to work with them on developing a program. We spent three months on developing the model. As part of the arrangements, Zen agreed to establish a locally owned franchise business and engage local installers where possible and train those local installers. The company also agreed to run community information sessions and school education programs. As part of the program a research and development fund was developed which contributed \$100 per installation to future community sustainable projects. A local credit union was engaged to provide low cost loans for the project participants. The Towong program won several awards including the *Economic Development Australia Award for Excellence in Environmental Innovation*.

In 2010 Zen initiated a community solar energy program at Victor Harbor called the C-Prep1 Program, which was modeled on the program at Towong. This quickly engaged other councils in the area and became the largest program of its kind in Australia, employing three full time equivalent staff and 45 Installers from the local region to deliver the program. The program evolved into the State-wide LGA endorsed Solar Councils Community Program, in which 38 councils had participated. The state-wide program had resulted in 3,823 systems being ordered, 10.1 MW's installed, \$8,166,703 in fees paid to local electricians employed on the installations and local ZEN Franchisees. The LGA Renewable Energy R&D Fund, established by the LGA State Executive Committee at its 22 July 2010 meeting, received \$385,000.

Richard Turner told delegates that Zen had now released an energy storage system. One, which is about the size of a refrigerator, is a residential unit, which can store about 20kw hours of energy, which is enough to supply the energy use of an average house. He said the company had also produced a containerised system, which can store about 6mw hours of energy, which is enough to meet the energy requirements of small remote towns.

SUSTAINABLE COASTAL COMMUNITIES AND CLIMATE ADAPTATION

The first session on Wednesday 27 March looked at the findings of a major research effort which has been aimed at helping to foster a more resilient and sustainable coastal zone. The CSIRO Coastal Collaboration Cluster is a major research program involves five research themes, which are studied across seven universities. There are three researchers involved in the project who will report on the findings.

Professor Richard Kenchington specialises in coastal and marine resources sustainability and marine protected areas management. He is the principal investigator for the integration theme of the Coastal Collaboration Cluster, which is funded by the CSIRO Wealth from Oceans and Climate Adaptation research flagships. He told delegates the object of the cluster is to look at

how knowledge can be applied better in coastal governance. It flows from a concern within CSIRO that better and better science is happening but that it hasn't been getting effectively into the governance world, and this flows in part from the culture of science. The broad aims of the project are to improve coastal management. We want to be able to build capacity to respond to extreme events, increase community preparedness, and prevent vulnerability leading inevitable to disaster. It is about establishing an effective sustainable coastal management cycle. It's about understanding the context of management, establishing a collaborative framework of people who should be involved, findings the facts, establishing a vision from that, developing policy and developing a plan from that, then implementing the plan, monitoring the program, learning from that and then doing the whole thing all over again. We are not about making one plan that stands forever. Plans involve some irreversible decisions, which stand forever. Many of the decisions are not irreversible. It is a cycle of knowledge gathering and refinement, reframing in terms of changing social, economic and environmental contexts.

What are the barriers? The project is based around removing or working to remove the barriers to the application of science in coastal zone management. It comes in part from a historical and cultural background where scientists are generally seen as having enormous brains and very complicated computerized things with lots of numbers and communicating through a computer model. Science is very much in that cultural model in terms of the bi[physical process and mechanical stuff. We can find the answers that way. Science has a long and honorable culture of structured and careful investigation. That is the background to the issue. That side of science is well developed but we are only now seeing the social side of science beginning to get a better weighting. Up until now there has been the 'real' science and what is viewed as the 'fluffy' social science. Part of the challenge of the project, and one of the reasons it was developed within the CSIRO framework, was to find out how we can engage more relevantly with the rest of the world. Politicians are often asked "the science is good why don't you act on it?" The reason is political will. I have spent a bit of my time doing workshops for scientists and people working in local government on the subject of political will. One of my heroes is a man called Jeremy Harris, who was a marine biologist and the mayor of Honolulu. We were attending one of those workshops with some coral reef scientists and he explained political will by saying: "if you want me to have political will then form a parade and I will lead it. If there's no parade to lead then I'm no use as a politician, and if I go where the parade won't follow I'm no longer a politician." That business of trying to turn political will into a guilt trip, which is sometimes expressed as: "I've told you should be happening from a scientific viewpoint, you should have the political will to do it" has been an obstacle in many of the discussions between science of various persuasions and government.

So, what should we be managing? We are not managing the coast or the fish or the trees, what we are really managing is what people do or do not do, or want to have done or do not want to have done with respect to the coastal zone. It comes back to people. We are about managing the opportunities and constraints of human activities in the coastal zone. To gain a better understanding on the integration theme we worked closely with the southern NSW councils and attended a number of discussions with the councils' environmental and social groups and developed through those discussions a number of propositions that seemed to make sense to the people in that context. From those discussions we prepared a questionnaire and asked people to let us know whether they agreed or disagreed with those propositions. The propositions were statements made verbatim by people attending the council discussions. There were five categories that we sorted them into as follows:

Resourcing in-house capacity;
Concern about lack of guidance and practical examples for local government;
Legal and regulatory issues;
Assets; and
Community expectations and communication.

I will now take you through some of the statements and comments. 'Councils typically don't have in-house capacity for decision support tools' – there was broad agreement with this: 55 people agreed and only 7 disagreed. "If you have a climate change officer, all the responsibilities for climate change go to that person and the engineers do what they want because the matter has been dealt with.' There was a lot of controversy about this and it had the highest level of disagreement. There was strong agreement that 'it was good for councils to have expert academic and community advisory groups to support in-house expertise on the coastal impacts of climate change.' We left space on the questionnaire for people to make their own comments and these are a selection from the comments:

'not all councils are the same'
'councils and state government decision makers have expert capacity but do not have access to tools and resources'
'councils should listen to expert academic and community advisory groups that support in-house expertise'
'real problems over lack of coordination between Federal, state and local government over climate change'
'uncertainty about timing creates uncertainty'
'absence of response to climate change issues exposes councils to voter dismay'
'improvements needed to the framework to identify council responsibilities'
'there is no overriding objective to address climate change impacts on the coast. It is one of a list of numerous issues to be addressed by local government'
'inconsistent benchmarks cause confusion'
'councils are constrained by the need to protect public infrastructure'
'capital cost is beyond most councils' budgets for infrastructure'
'research agencies do not have sufficient technical or financial resources to provide long-term user support'
'science is communicated at too high a level to allow community understanding'
'research agencies have limitations to communicating and sharing science because of intellectual property rights'
'simulation tools are not yet available in suitable formats for managers and decision-makers'
'transition from research to implementations is too slow'
'industry says agencies need help to communicate'
'voluntary organisations say that science needs to be understood. This is where the rubber hits the road'

Associate Professor Laura Stocker is the deputy leader of the Coastal Collaboration Cluster. She researches and teaches with the Curtin University Sustainability Policy Institute, in Western Australia. She told delegates that the research that Richard Kenchington's theme had done and some of the interviews her group did with local governments, state government and NGOs – scientists, decision-makers and policy-makers – could be encapsulated in this diagram.

At the centre of our area of interest is the idea of legitimacy to take action in relation to coastal adaptation to climate change or other environmental pressure. Legitimacy depends on four domains:

- Good governance
- Good knowledge system/science
- Lay knowledge/ management knowledge
- Indigenous knowledge

It also requires the constituency, that is the community at large, and also the stakeholders who create political mandate to give legitimacy to governance and knowledge. It also requires the implementation of knowledge and governance and that's where the rubber hits the road. Ideally, as you can see, those different domains strongly inform each other and there are close relationships and good quality conversations between those four domains. In order for good quality governance, that governance has to be effective and it has to be accountable. Knowledge has to be an adequate representation of the real world. It has to mirror what we see around us in terms of empirical facts, and it has to be consistent and coherent within itself and the constituency, or the community and stakeholders have to say 'yes, we think that governance and knowledge is relevant to us and we think it's credible'. So, that is how the constituency can confer legitimacy on knowledge and governance. Then, in the implementation stage, you need to have standards. All the knowledge and governance has to be embedded in standards and good professional practice. These were the sort of criteria that our interviewees told us were necessary for those four domains to function well. There are conditions that need to be met for each of these criteria to be realized. Sometimes that does not happen easily, but it can happen more easily if we have what we call boundary processes in place. These processes are a way of increasing the conversation between governance, knowledge, the constituency and the implementation phase because each of these domains has tight boundaries around it. In order to cross those boundaries and have conversation across those boundaries we can put in place some processes to improve that. Boundary processes are things like convening, or bringing together all the players to have a conversation, translating, which means taking the scientific information and translating it into a format that's understandable and useful to governance, but it also means taking information about governance and giving it to scientists in a way they can understand because there are a lot of researchers that don't really understand how governance works. It can be as complicated for the scientists as science is for the governance people. Mediating conflict is also important where people have different world views and different values. Part of mediation is showing that at least there has been procedural fairness. Finally, collaborating, where those other processes can lead to a joint production of new information, a new idea or a new project, or a new outcome that every has contributed to.

Each of these criteria, according to the people we interviewed, are also generated by a range of conditions that our respondents suggested to us, such as the importance of a sustainability framework, importance of policy communities and networks, diverse approaches to engagement, capacity to respond to new information, in the case of accountability, the need to have best available science central to policy, how to escape the liability vortex, how do the deal with the legacy of past decisions – these are the sort of issues that people have to address to make their governance accountable. In terms of knowledge it needs to be rigorous, there have to be complete and continuous data sets, knowledge has to be able to deal with complexity and uncertainty, and it has to deal with multiple perspectives. It has to be coherent and cogent – you need to have different types of knowledge telling the same story, or at least telling a

complementary story. Coastal planning policies should be embedded in town planning schemes and there should be clear rules available for implementation purposes. Professional practice can be improved by strong communities of practice and scientific uptake into professional practice. A number of respondents commented on the need for better guidelines for coastal risk and vulnerability analyses. Constituencies need to feel that people providing information are credible scientists and engineers. The community needs to have its own literacy developed in relation to climate change and climate adaptation and we need to be able to learn from disaster and be aware of each others' world views.

In terms of the relevance of science, it needs to be applicable science. It has to be local. Decision-makers need to be really clear about what information and data they actually need and be prepared to share that. In order to try to create tools and the necessity for those types of conditions to be met, the cluster has developed some tools. For example, the Adelaide team did research into social networks and the significance of professional networks for coastal adaptation and planning. Out of that they developed a tool whereby project officers and decision makers can map their own networks. The purpose of doing this in a formal way is to help you identify key players and the power they hold, to develop trust between the various actors, to facilitate the spread of scientific information, to identify flows and blockages in networks and to build consensus and common goals within the network. This is information that you probably already have in your head. It is a way of getting it down on paper. The Tasmanian/Victorian team has developed a project design tool which looks at the relationship between the coastal issue that you are already dealing with and what is at stake and for whom. This tool helps you improve the way scientific information can be incorporated into coastal management and helps you design a project that gives you greater understanding of the project you are dealing with and how the needs of stakeholders can be met.

This is a tool for project officers and managers in order that they can get the most out of their research and consultancies. Sometimes, if there is a difficult issue, you might have a range of consultants working on the issue but you might be getting incompatible results from the various consultants and it makes it hard to go forward. That suggests the overall project has not been well designed in the first place. Tim Smith's group has developed an adaptive learning tool which is for senior managers in local government or other organisations, which is a set of guidelines and methods for how your council can become a learning organization, how it can adapt to change and how it can adapt to the new information that is coming at you from so many different sources. Tim's group has developed a series of case studies on how that can work, following on from the guidelines, and they've developed a monitoring and evaluation framework so you can see how your organization is tracking in terms of its learning capabilities. Our group has developed some tools, which are designed to help with engaging the community and stakeholders. The other tools are more focused on the organization and researchers and these tools can be about how to engage the public in creative ways to understand complex science. We have designed a set of guidelines around using Google Earth to do participatory mapping. We have done that with the City of Mandurah, City of Fremantle, Rottnest Island Authority and others. We developed a coastal adaptation scenario tool, some guidelines for running coastal adaptation art exhibitions, guidelines for developing a web site around indigenous coastal knowledge and an ongoing project about coastal sustainability report cards. All of these things are about communications between local government and researcher.

Chiara Danese is a PhD candidate at the Curtin University Sustainability Policy Institute. She is also on the staff of the City of Cockburn and Cockburn Sound Coastal Alliance, in Western Australia. She told delegates her job is to help the members of the Alliance to develop tools for coastal vulnerability assessment, risk assessment and adaptation plans, and that her PhD focuses on coastal governance. Her job with the Alliance gives her valuable insight into the challenges facing local government in relation to the coast. Chiara said the guidelines that are being developed are at a draft stage. The section of coast involved in the study was the stretch from Fremantle to Rockingham, which includes heavy industry and intensive development. This coastline plays an important role in the West Australian economy. In stage one you work with coastal engineers to assess coastal vulnerability. This stage involves setting up the project governance and the scope of the project. You do your data inventory and gap analysis, choose your climate change scenarios and timeframes, and then you look at the beach response models and assumptions. Then you look at the current and future behaviour under different climate change scenarios and timeframes. This identifies hot spots of vulnerability to erosion and inundation hotspots and physical 'tipping points'. It is important to identify that because the sediment supplies are not infinite. Then you ask the consultant to evaluate the methodology used.

Stage two, which is currently out to tender, is looking at values and risk assessment. We want a stakeholder engagement strategy, and we are going to do an inventory of built and natural assets, including functions and services, to value the ecosystem. We look at the risk identification, the likelihood and consequences of risk in terms of the value at risk. The value covers economic, social, cultural, environmental and cumulative values. This helps us to determine the tolerable level of risk, with indicative costs and timeframes of adaptation options. Then we evaluate the methodology used. Chiara then outlined the steps involved in stage three, which covers the development of an adaptation plan. This included preparing a stakeholder engagement strategy, assessing identified values at risk and flexible adaptation plans with the community, reviewing the optimal timing for the implementation of intervention measures and establishing ongoing monitoring program needs. It included developing coastal management strategies, a communication strategy and then evaluating the methodology used. Stage four is the stage at which you review the process and report on the outcomes of all stages. This stage includes stakeholder engagement, a review of the project governance, and the applicability of the findings within the current policy framework. Stage five is the implementation and monitoring stage, which needs to take into account the policy of the local government area and relevant agencies. It involves undertaking the required coastal rehabilitation works at vulnerability hotspots and implementing communication strategies to maximise community involvement.

CLIMATE CHANGE ADAPTATION GOOD PRACTICE

This session identified examples of good practice in climate change adaptation selected by the National Climate Change Adaptation Research Facility (NCCARF). It was presented by Dr David Rissik, Deputy Director of NCCARF.

David Rissik told delegates that NCCARF had a number of research networks. He said the organization is focused on research that is driven by end users, because this was more likely to achieve outcomes that were useful to people. Our pathway to success from research action is having end users involved throughout the course of projects. NCCARF had a strong focus on delivering information that is easily accessible to decision makers. He said timely delivery is also

essential. It is also important to remember that when you are dealing in an academic environment you need to have high quality research outputs because if academics are not able to publish the outcomes of their work they will not be able to do the research, because it will be of little use in terms of their career developments.

David Rissik said apart from the research portfolio there are other things that NCCARF does. He showed a slide indicating some work that NCCARF had undertaken on policy guidance. He said NCCARF is focusing on 12 particular areas including coasts, biodiversity through to settlements and infrastructure. He said we meet with a small group of practitioners to talk through the issues they are facing in relation to adaptation and to think through what some of the opportunities are in terms of policy needs and to make sure adaptation starts happening. In the coastal area we have worked in northern NSW, which is an area that has a lot of issues associated with the impacts of the ocean on the land and the way we manage it, and we were able to come up with some strong policy guidance that we released recently. We have to focus on getting our reports out as quickly as possible. There are 144 of them, with about half of them out at the moment, which contain some very interesting information. Between 30 and 40 of these reports are of direct relevance to local government. We have tools that have been developed in certain areas, we have looked at barriers to adaptation for local government and ways of getting around them. We are in the process of engaging with people as widely as possible and our researchers are encouraged to get end user events happening. If you haven't had an event in your area yet please contact us and let us know.

Dr Rissik said the main thing he wanted to talk about is climate change good practice. He said we are not yet at a stage where we can talk about best practice, but we can identify good examples and pass that information on to help people do their job better. He said NCCARF recognized that local government relies a lot on consultants and contractors to help them do the work in this area and there is varying capacity among those service providers. What we are trying to do is identify examples of good practice across Australia and use those examples to provide tangible and practical examples to others about how they can learn from the experience of their peers. He said this was a good model to use because people in local government were more likely to take notice of what their peers were doing than they would with guidance from government or the research community. The project has three phases – research, communication and dissemination. On the research side we prepared a questionnaire which was distributed to a range of people around Australia seeking their input to identify examples of good practice and criteria associated with good practice. If we can distil those things we can start to help people working in this area to do their job better. We established a review group with the Department of Climate Change to sift through the examples and select them and then look at the criteria associated with them. We received information on about 150 examples of good practice and more than 250 criteria about what good practice is. There was good response from local government people and a good representative sample from a national perspective. The review group was set up with representatives from local government, industry, state governments, consultants, NRM groups and the Department of Climate Change. Sometimes we had two or three examples from one local government area or region and we needed to integrate these. We had a good example in South Australia of a state approach linking in well with a regional approach and local government. In Tasmania we found an approach focusing on climate futures with climate change projections, which is often very uncertain and difficult to work with. The City of Melbourne is doing some good work from an adaptation perspective which links into some of the infrastructure in Melbourne such as the metro network. The City of

Townsville has a wide range of studies together with some work done by the Department of Defence and issues related to sustainability. The Great Barrier Reef Marine Park Authority has a really good climate change adaptation and there is also good work being undertaken by the Great Barrier Reef Foundation, which has a climate change adaptation and research plan and we looked at how these projects interact. Brisbane Airport has done some work to take sea level rise into account for the future of the airport, which is being driven by their investors, and there is something in that to learn about why the investment community is looking at that risk and starting to deal with it. In the Hunter region there is a collective of councils that is doing some forward thinking around adaptation. Sydney Coastal Councils Group has done some good work with two projects. In Western Australia we have the Peron-Naturaliste project, which also involves a group of councils coming together to work on the issue. The City of Mandurah was nominated by a number of people who responded to our survey. Fortescue Metals Group as an organization is doing some good adaptation work. The Greencross organization has done some good things around climate change adaptation, taking photos of king tides to give people an idea of what climate change might look like as a result of sea level rise. We have some work at a national scale, which is funded by NCCARF, to quantify the cost of climate change on local government assets and we have developed a tool to help people do that. One other example is a project Sydney Water is working on with local government in relating to climate change adaptation and water services.

As a result of looking at these examples we came up with critical success factors, based on the criteria people have identified as being necessary for climate change adaptation. The five we have identified are focused on leadership, it is important for someone within the organization to push it strongly through the organization; engagement is important, bearing in mind that you can't do it alone – you need community engagement and understanding; cost is obviously very important – there are trade offs between what you need to spend now and what you need to spend later; sustainability is important – realizing that climate change is not going away, it is probably going to get worse so we need to think about actions that are sustainable into the future; and the issue of connectivity is important – you can't just think about things in isolation, you've got to think about how they connect to others. What partnerships are necessary to do that?

NCCARF will now be developing up those case studies and we aim to keep them to 10 to 15 pages per case study with a two or three page summary. Each of the case studies will focus on the critical success factors and we will also be looking at what are the overarching lessons to be learnt from each of the case studies. It is no good identifying those good practice examples if they are just left to sit in a computer or on our shelves. The project is about getting the information out to the people who need it. We need to impart knowledge about this good practice and we need to encourage people to embrace this whole process. David Rissik encouraged delegates to access the NCCARF local government portal, which he said has some good information available – www.nccarf.edu.au/content/local-government-portal

(Please note: The following sessions are yet to be completed)



City Administrative Centre
Bridge Road (PO Box 42), Nowra NSW Australia 2541 - DX 5323 Nowra
Phone: (02) 4429 3111 - Fax: (02) 4422 1816

Southern District Office
Deering Street, Ulladulla - Phone: (02) 4429 8999 – Fax: (02) 4429 8939

Email: council@shoalhaven.nsw.gov.au

Website: www.shoalhaven.nsw.gov.au

For more information contact the Assistant General Manager's Group

Councillor and Staff Interaction Policy

Policy Number: POL13/31 • **Adopted:** *[Click here to enter date]* • **Minute Number:** *[Click here to enter Minute number]* • **File:** 13541E • **Produced By:** Assistant General Manager's Group • **Review Date:** Missing TRIM data for Review Date

1. PURPOSE

To clearly define the roles and responsibilities of councillors and staff in relation to professional and acceptable interaction.

2. STATEMENT

A strong relationship between Councillors and staff, based on trust, respect and mutual understanding, is paramount to ensure that the Council acts "as one", in striving to serve the community with common purpose and aspirations.

These Guidelines set out the positive steps we can take to foster good relationships, but also acknowledges the restrictions imposed by the Local Government Act and the Code of Conduct. Understanding where the "line is drawn" is important; so too the need to ensure that we don't create an "us & them" mentality. These Guidelines are designed to achieve a happy medium.

Council wishes to encourage appropriate interactions between staff and Councillors to achieve:

- Councillor knowledge and understanding of policy, Works Programs and statutory requirements for both staff and Council.
- Staff understanding of political views.
- A greater sense of teamwork between Councillors and staff, to achieve the aims and objectives of the Community Strategic Plan.

3. PROVISIONS

3.1. Councillor Interactions Permitted

- Contact with any staff member on the "Councillor Contacts" list – eg, email/telephone enquiries.
- Arrange meetings with staff on the Councillor Contacts list.
- Facilitating discussions between constituents and the appropriate staff on the Councillor Contacts list, including requesting on-site discussions.

- Spending time (eg, a day) with individual staff or work teams on work sites (but only with their concurrence), to better understand the staff responsibilities and duties – subject to the following requirements –
 - Arrangements being made through the relevant Group Director or a Section Manager.
 - Compliance with the Code of Conduct requirements and restrictions.
 - Compliance with any WHS requirements, as instructed by the staff member or team supervisor, including use of PPE or restricting access to some work sites (eg, confined space area). Note: for construction sites a WorkCover General Induction card may be necessary.
 - Compliance with any legislative requirements re confidentiality or privacy matters that you may become aware of whilst accompanying an employee.
 - Compliance with any legislative prohibition to enter private premises in the company of staff unless the property owner or occupier consents to such entry.
 - The individual staff member or team agreeing to “host” a Councillor during their normal work day.
 - The Councillor not impeding staff undertaking their duties.
 - The Councillor and employee (or “team leader”) providing a short evaluation report of their “host” day to the relevant Section Manager.

3.2. Other Interactions

Staff and Councillors may also interact at other professional levels; i.e., not a “Councillor/staff” relationship.

Examples:

- Interactions when a Councillor is an applicant for a Development Application or other service; i.e., just like any other member of the public.
- Interaction between staff and a Councillor in their normal occupation or business role.

3.3. Councillor Contacts

A list of approximately 50 staff (<http://sccintranet/GM/CouncillorContacts.aspx>) is available for Councillors to contact and discuss issues within their area of responsibility.

3.4. CODE OF CONDUCT restrictions

PART 6 RELATIONSHIP BETWEEN COUNCIL OFFICIALS

Obligations of councillors and administrators

6.1 Each council is a body politic. The councillors or administrator/s are the governing body of the council. The governing body has the responsibility of directing and controlling the affairs of the council in accordance with the Act and is responsible for policy determinations, for example, those relating to workforce policy

6.2 Councillors or administrators must not:

a) direct council staff other than by giving appropriate direction to the general manager in the performance of council’s functions by way of council or committee resolution, or by the Mayor or administrator exercising their power under section 226 of the Act (section 352)

- b) in any public or private forum, direct or influence or attempt to direct or influence, any other member of the staff of the council or a delegate of the council in the exercise of the functions of the member or delegate (Schedule 6A of the Act)
- c) contact a member of the staff of the council on council related business unless in accordance with the policy and procedures governing the interaction of councillors and council staff that have been authorised by the council and the general manager
- d) contact or issue instructions to any of council's contractors or tenderers, including council's legal advisers, unless by the Mayor or administrator exercising their power under section 226 of the Act. This does not apply to council's external auditors or the Chair of council's audit committee who may be provided with any information by individual councillors reasonably necessary for the external auditor or audit committee to effectively perform their functions.

Obligations of staff

6.3 The general manager is responsible for the efficient and effective operation of the council's organisation and for ensuring the implementation of the decisions of the council without delay.

6.4 Members of staff of council must:

- a) give their attention to the business of council while on duty
- b) ensure that their work is carried out efficiently, economically and effectively
- c) carry out lawful directions given by any person having authority to give such directions
- d) give effect to the lawful decisions, policies, and procedures of the council, whether or not the staff member agrees with or approves of them
- e) ensure that any participation in political activities outside the service of the council does not conflict with the performance of their official duties.

Inappropriate interactions

6.7 You must not engage in any of the following inappropriate interactions:

- a) Councillors and administrators approaching staff and staff organisations to discuss individual or operational staff matters other than broader workforce policy issues.
- b) Council staff approaching councillors and administrators to discuss individual or operational staff matters other than broader workforce policy issues.
- c) Council staff refusing to give information that is available to other councillors to a particular councillor.
- d) Councillors and administrators who have lodged a development application with council, discussing the matter with council staff in staff only areas of the council.
- e) Councillors and administrators being overbearing or threatening to council staff.
- f) Councillors and administrators making personal attacks on council staff in a public forum.
- g) Councillors and administrators directing or pressuring council staff in the performance of their work, or recommendations they should make.

- h) Council staff providing ad hoc advice to councillors and administrators without recording or documenting the interaction as they would if the advice was provided to a member of the community.
- i) Council staff meeting with applicants or objectors alone AND outside office hours to discuss applications or proposals.
- j) Councillors attending on-site inspection meetings with lawyers and/or consultants engaged by council associated with current or proposed legal proceedings unless permitted to do so by council's general manager or, in the case of the Mayor or administrator, exercising their power under section 226 of the Act.

3.5. LOCAL GOVERNMENT ACT restrictions

Section 352 Independence of staff for certain purposes

- (1) A member of staff of a council is not subject to direction by the council or by a councillor as to the content of any advice or recommendation made by the member.
- (2) This section does not prevent the council or the mayor from directing the general manager of the council to provide advice or a recommendation.

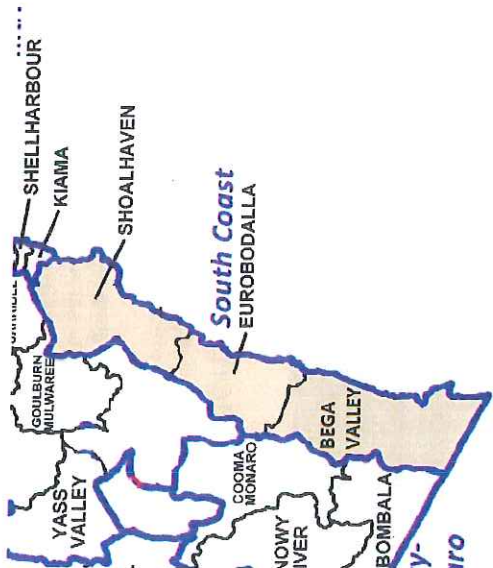
4. REVIEW

This policy will be reviewed every three years, or at the discretion of the General Manager in consultation with the Consultative Committee.

5. APPLICATION OF ESD PRINCIPLES

This Policy will be placed on Council's intranet.

South Coast regional grouping options



The Panel recommends . . .

Consideration of a new structural arrangement for the existing LGAs of Shoalhaven, Eurobodalla and Bega Valley.

Panel's Preferred Options ("Future Directions for NSW Local Government")

- No change to existing LGAs
- Configure the councils as a multi-purpose county council, based around the regional centre of Nowra.

N.B. Data has been drawn from a number of sources, including: ABS population figures; DPI population projections; TCorp analysis of councils' size and information submitted by local councils in annual returns. The data should be used as a guide only for assessing the councils' size and financial challenges.

Regional characteristics

	South Coast	Shoalhaven	Bega Valley	Eurobodalla
Geographical area (km ²)	14,238	4,530	6,279	3,428
Population 2011	166,035	96,043	32,999	36,993
Projected population 2036	232,100	130,200	46,000	55,900
Calculated annual population growth rate to 2036	1.35%	1.22%	1.34%	1.67%
Electors 2012		70,804	24,269	27,659
Electoral arrangements	TBD	3 Wards, each with 4 councillors. Mayor is popularly elected.	No wards, 5 councillors. Mayor is elected by council.	No Wards, 9 councillors. Mayor is popularly elected.
Total ratepayers	99,215	55,427	19,166	24,622

South Coast regional performance measures

Financial sustainability

Results presented within these tables are derived from the 2012 TCorp analysis of NSW councils.

☐ Meets benchmark
 ☐ Below benchmark

What do the ratios mean?

Sustainability rating and outlook

Operating Ratio

Benchmark = Better than negative 4%
Measures a council's ability to contain operating expenditure within operating revenue.

Interest Cover Ratio

Benchmark = Greater than 4.0x
Indicates the extent to which a council can service its interest bearing debt and take on additional borrowings.

Debt Service Cover Ratio (DSCR)

Benchmark = Greater than 2.0x
Measures the availability of cash to service debt including interest, principal and lease payments

Unrestricted Current Ratio

Benchmark = Greater than 1.5x
Specific to Local Government, designed to represent a council's ability to meet debt payments as they fall due.

Own Source Operating Revenue Ratio

Benchmark = Greater than 60%
Measures the level of a council's fiscal flexibility. It is the degree of reliance on external funding sources such as operating grants and contributions.

Cash Expense Cover Ratio

Benchmark = Greater than 3.0 months
Indicates the number of months a council can continue paying for its immediate expenses without additional cash inflow.

Infrastructure Backlog Ratio

Benchmark = Less than 0.02x
Shows what proportion the backlog is against total value of a council's infrastructure.

Asset Maintenance Ratio

Benchmark = Greater than 1.0x
Measures actual spending on asset maintenance, compared to required spending.

Building & Infrastructure Asset Renewal Ratio

Benchmark = Greater than 1.0x
Compares the proportion spent on infrastructure asset renewals and the asset's deterioration measured by its accounting depreciation.

Capital Expenditure Ratio

Benchmark = Greater than 1.1x
This indicates the extent to which a council expects to expand its asset base with capital expenditure on both new assets, and replacement and renewal of existing assets.

	Shoalhaven	Bega Valley	Eurobodalla
Sustainability Rating	Sound	Sound	Moderate
Outlook	Negative	Neutral	Neutral

Performance

	Shoalhaven	Bega Valley	Eurobodalla
Operating Ratio	(0.4%)	2.7%	(1.5%)
Interest Cover Ratio	10.79x	10.70x	5.83x
Debt Service Cover Ratio	3.85x	5.14x	3.10x
Unrestricted Current Ratio	2.17x	2.92x	2.91x
Own Source Operating Revenue Ratio	72.2%	60.8%	70.3%
Cash Expense Ratio	4.1 months	10.9 months	1.4 months

Infrastructure

	Shoalhaven	Bega Valley	Eurobodalla
Infrastructure Backlog Ratio	0.02x	0.09x	0.03x
Asset Maintenance Ratio	0.78x	1.11x	0.70x
Building and Infrastructure Asset Renewal Ratio	0.40x	0.82x	0.76x
Capital Expenditure Ratio	1.36x	0.91x	1.20x

Observations

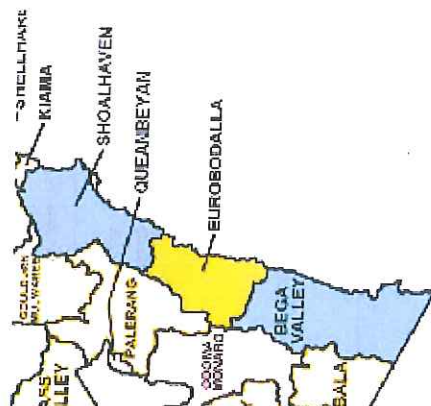
- The councils in this group have performed reasonably well when assessed against the TCorp performance measures, with Bega Valley and Eurobodalla projected to maintain their sound and moderate ratings and Shoalhaven projected to move down to a moderate rating within three years.
- All councils in this grouping have a good liquidity result, have achieved favourable operating results or close to break even for 2012 and have the capacity to service additional debt, as assessed by TCorp's ratios. Infrastructure backlog ratios are close to benchmark for two of the councils, with Bega currently focusing on an asset maintenance program to reduce its backlog.
- The building and infrastructure renewal results are well behind the TCorp required benchmark, with both Shoalhaven and Eurobodalla also coming well under the required asset maintenance benchmark.
- With a good level of own source revenue, councils in this grouping have less reliance on external funding to support their infrastructure, maintenance and asset renewal program. This should enable them to achieve better results when compared to other councils with lower levels of own source revenue. There may be opportunities to share resources and capability across the councils to improve these results.

South Coast regional options

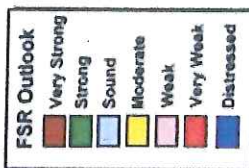
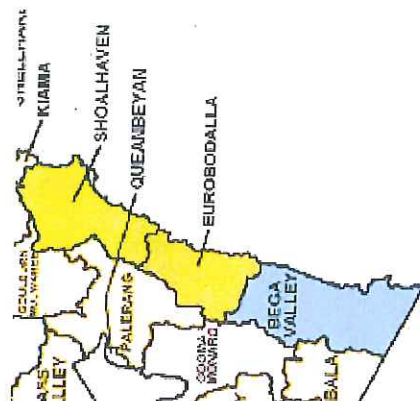
Regional outlook

Councils within the grouping are relatively stable financially, although Shoalhaven's position is expected to decline in the next three years to a moderate rating. While all councils have infrastructure backlogs to address, they are not of the same scale as coastal councils in the north. There is potential to improve the infrastructure outlook across the grouping and to continue to strengthen and diversify the local economic base. The region has an adequate supply of greenfield sites to meet future housing needs and it is expected that most new growth will be based around existing urban centres, reducing the need for major infrastructure investment. Although the grouping is experiencing above average population growth, it should be noted that much of this growth is in the over 60s cohort and this may impact on service delivery in the future. The region enjoys a diverse economic base, with agriculture providing the mainstay in the south and manufacturing, trades and services stronger in the north. Tourism contributes to the regional economy and there is potential for further development in this area.

Financial sustainability:
Current position



Financial sustainability:
Projected rating



Financial data

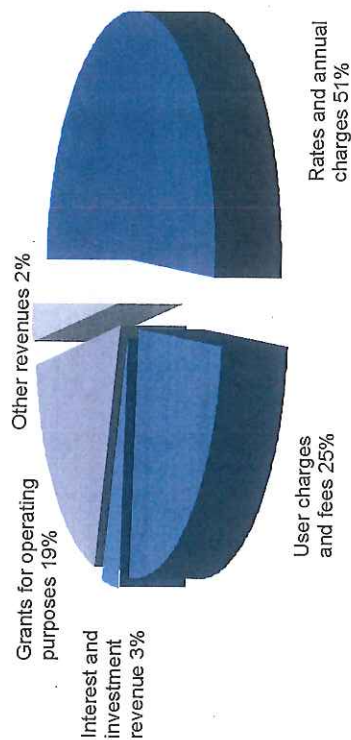
Based on 2011-2012 financial year.

Revenue Source	South Coast (000's)	Shoalhaven (000's)	Bega Valley (000's)	Eurobodalla (000's)
Residential rates	\$71,223	\$40,701	\$14,099	\$16,423
Business rates	\$9,185	\$4,135	\$1,837	\$3,213
Farmland rates	\$3,597	\$1,627	\$1,639	\$331
Mining rates	\$0	\$0	\$0	\$0
Special rates	\$948	\$168	\$0	\$780
Total rates	\$84,953	\$46,631	\$17,575	\$20,747
Rates and annual charges	\$179,261	\$94,868	\$38,754	\$45,639
User charges and fees	\$86,824	\$48,978	\$14,206	\$23,640
Interest and investment revenue	\$11,215	\$6,819	\$2,727	\$1,669
Grants and contributions for operating purposes	\$64,966	\$22,075	\$25,070	\$17,821
Other revenue	\$8,295	\$5,033	\$570	\$2,692
Total revenue TCorp	\$350,561	\$177,773	\$81,327	\$91,461

TCorp revenue figures may exclude some revenue line items unique to the council or for the 2012 period

Version 1: Prepared to support the deliberations of the Independent Review of Local Government Panel

South Coast income sources



All councils in this grouping have a strong level of own source revenue with all councils meeting the TCorp benchmark and both Shoalhaven and Eurobodalla achieving results above 70%. The combined grouping provides a good mixture of rating revenue shifting some of the reliance from residential rating to both business and farming rating income.

South Coast regional options

Infrastructure management

Although all three councils in the grouping are carrying infrastructure backlogs, they are not of the same scale as other coastal councils in NSW. However, continued patterns of underspending on asset maintenance and renewal need to be addressed. Asset management capabilities within the grouping vary, so there is scope for a collective arrangement between the councils to share expertise and build capacity. As with other coastal areas, the region is subject to extreme weather events which can result in the need to replace or repair assets outside of normal renewals schedules.

Current asset position

Roads and bridges make up a substantial proportion of the grouping's assets and represent the majority of the infrastructure backlog works. All three councils currently manage their own water and sewerage services and have identified the need for further capital investment for upgrade and augmentation works.

	South Coast	Shoalhaven	Bega Valley	Eurobodalla
Total Roads (KM's)	3,717	1,594	1,169	954
Total Bridge Length (M)	7,677	2,468	3,457	1,752
Total Assets 2012 (Tcorp 000's)	\$3,833,099	\$2,467,790	\$871,673*	\$1,300,045
Assets Per Capita	\$23,086	\$25,695	\$26,413	\$35,143
Total Infrastructure backlog (Tcorp 000's) 2012	\$132,006	\$37,208	\$66,773	\$28,025
Infra. Backlog Per Capita	\$795	\$387	\$2,023	\$758

* Bega total assets figures from TCorp 2011 accounts due to an error made in the 2012 accounts

Accessibility

Travel distances within this grouping are outside the guidelines recommended by the Panel, assuming that the regional centre of Nowra serves as the administrative centre for the grouping. The Bega LGA is particularly disenfranchised in this regard. Shifting the administrative centre to the major settlement of Batemans Bay (in Eurobodalla LGA) would bring the distances within the recommended two-hour travel time, but may serve limited value in administering the region, as major support services and stakeholders are still located in Nowra.

Journey	Distance	Travel time
Nowra - Bega	263.6 km	3 hrs 19 mins
Nowra - Moruya (Eurobodalla)	144 km	1 hr 52 mins
Nowra - Batemans Bay (Eurobodalla)	118 km	1 hr 33 mins
Bega - Batemans Bay	147 km	1 hr 48 mins

South Coast regional options

Stronger centres, stronger voice

Regional services and planning

The grouping is split between two Regional Action Planning areas, with Shoalhaven LGA being grouped with the Illawarra cluster and Eurobodalla and Bega being included in the South East RAP, along with Cooma-Monaro, Bombala, Snowy River, Palerang, Yass and Young. This may present some challenges in seeking to connect Community Strategic Plans with the State planning framework, as the current situation - where councils deal with multiple agencies in multiple regions - would continue. The grouping sits wholly within the Far South Coast Regional Development Strategy area, is wholly addressed by the South Coast Planning Strategy and is included within the proposed South East Local Land Services region.

Health Services

The grouping is split between two Local Health Districts, with the Shoalhaven being grouped with the Illawarra for health planning purposes and the two southern councils being included in the Southern NSW Local Health District. This may present some challenges for the grouping in achieving whole of region health planning, as Shoalhaven and Wollongong hospitals currently operate complementary health services, particularly in cancer care. The Southern NSW Local Health District includes LGAs as far afield as Upper Lachlan, Yass and Snowy River, so there are limited connections between the Bega and Eurobodalla communities and these regions. However, major upgrades are planned for health facilities at Bega, with work on the \$170m South East Regional Hospital scheduled to begin in mid 2013. The project is due for completion in 2016 and should reduce the need for Bega residents to travel outside their shire for medical services. It will also improve access to services for people in Eurobodalla.

Economic development

The region currently has a stronger technical and trades-based workforce than other NSW regions, although the tertiary employment sector (including retail, health and hospitality) is still the largest employer. Agriculture provides a strong economic base, particularly in the southern parts of the grouping, with manufacturing stronger in the north. Tourism contributes substantially to the local economy. The Regional Development Strategy estimates that an additional 25,800 new jobs will need to be created in the next 20 years to meet the demands of the region's growing population. A collective arrangement for the councils in the grouping may help to support employment growth and industry development throughout the region.

Water supply

The three councils currently manage their water and sewerage services independently. Shoalhaven Water operates as a business unit of Shoalhaven Council and manages an extensive network of water supply, recycled water and sewerage systems. The council receives bulk water supplies from the Sydney Catchment Authority. The water is then treated and distributed throughout the network. Eurobodalla operates two water supply schemes, sourcing water from three local rivers. The council has recently completed a \$24m water treatment plant for the system. Bega operates four water supply schemes, sourced from a mixture of surface water and bores. The Bega schemes serve a number of small villages in the Eurobodalla Shire. At present, Bega's water supply receives only basic treatment (chlorination). There are plans to build water treatment plants for each of the schemes at a total cost of \$32 million. A collective structure for the councils could provide opportunities to share resources and expertise in developing regional water management options.

Transport

The areas are poorly served by public transport, with no direct rail link to Nowra and no Countrylink services between the centres. Coach services run between Bega and Canberra. There is limited access to private bus services within the major population centres of the region and most journeys between centres are by private vehicle. There is a regional airport at Moruya, serving residents in the Bega Shire, with the Shoalhaven relying on Sydney airport for domestic flights. A collective arrangement for the councils may help in developing the Regional Transport Plan. However, because of the split in the RAP areas, transport planning for Shoalhaven will be included with Wollongong, rather than the southern areas.

Population shift

Cluster analysis shows very low cross-border movements between the three LGAs in the grouping, as the areas are large enough to allow many inter-town and town-and-hinterland movements to occur without crossing LGA boundaries. The analysis also identified limited connection between the coastal LGAs and Canberra and surrounds, with the focus tending more to Sydney for higher level services, or Wollongong for regional services. While the region is experiencing population growth, much of the growth relates to an influx of retirement-aged residents. There has been a decline in the number of children and young adults in the region.



Agenda for today

- Overview of Future Directions paper and clarifying Q & A (30 mins)
- Finance and infrastructure proposals (25 mins)
- Governance, performance improvement and audit proposals (25 mins)
- Break (20 mins)
- Regions, County Councils and amalgamation proposals (50 mins)
- Implementation (10 mins)
- General discussion/wrap up (20 mins)

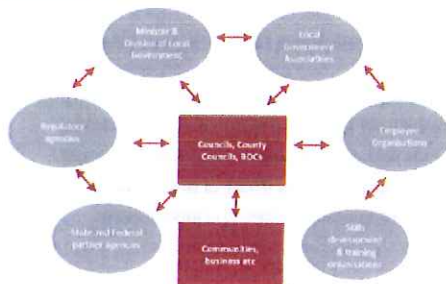
Stage 3 of the Panel's review

- This is a progress report for further consultation
- Panel's ideas are crystallising but not set in concrete
- A number of issues require additional research
- Proposals are NOT radical by inter-state or international standards – all have been 'road tested' somewhere similar to NSW
- They take into account the Government's policy of 'no forced amalgamations'

Panel's task

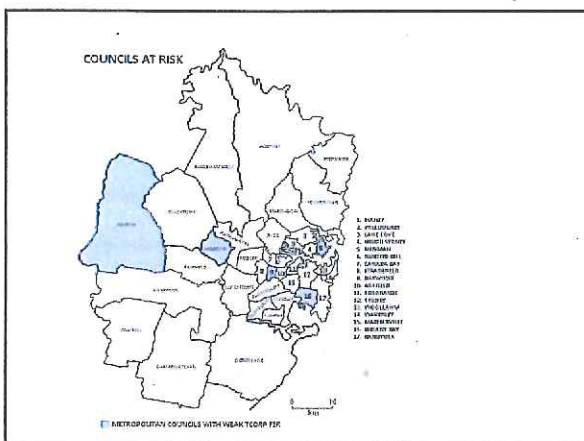
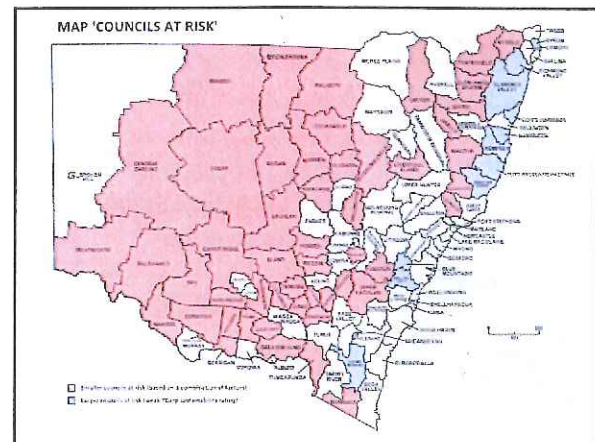
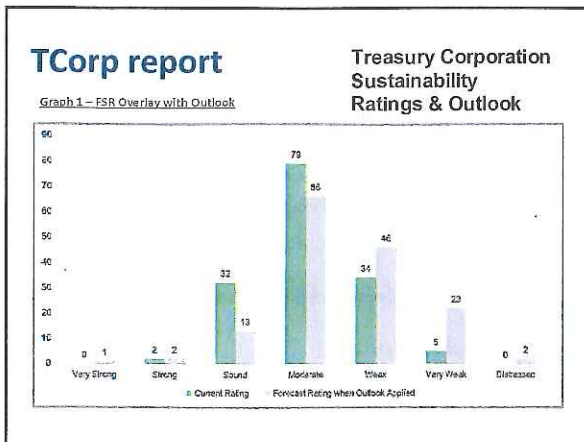
- Options for governance models, structural arrangements boundary changes:
 - To improve the strength and effectiveness of local government
 - To drive key strategic directions in 'Destination 2036' and the NSW 2021 State Plan
- Look to 2036 and beyond
 - A strategy for the mid 21st Century
 - Local government must change in a changing world
 - It's about lifting councils' game AND their sights

System focus



Strategic capacity

- Panel is NOT relying on economies of scale/cost savings arguments for larger councils (although they are significant)
- Fundamental goal is to enhance 'strategic capacity'
 - Coping with complex challenges and unpredictable change
 - More robust revenue base
 - Scope to undertake new functions/major projects
 - Ability to employ wider range of skilled staff
 - Knowledge, creativity and innovation
 - Credible and 'real' partner for State and federal agencies



Sustainability and Finance

- 'Fiscal responsibility' agenda
 - Councils to achieve breakeven operating results
 - Standard set of sustainability benchmarks
 - All councils to appoint a qualified Chief Financial Officer
 - Strengthen guidelines for councils' 4-year Delivery Programs
 - Auditor General to oversight local government audits
- Improve the rating system and streamline rate-pegging to generate essential additional revenue
- Progressively re-distribute grant funding (there's no pot of gold)
- Establish a State-wide Local Government Finance Agency

Infrastructure

- Tackle the backlog (reported as \$7.2bn in 2012) and close the annual maintenance gap (\$389m)
- Maintain the Local Infrastructure Renewal Scheme (LIRS) for at least 5 years, with a focus on councils facing the most severe problems
- Create a Strategic Projects Fund for roads and bridges
- Investigate the Queensland model of Regional Roads Groups, as well as options for cost savings through strategic procurement initiatives
- Require asset and financial management assessments of councils seeking special assistance

Productivity and Improvement

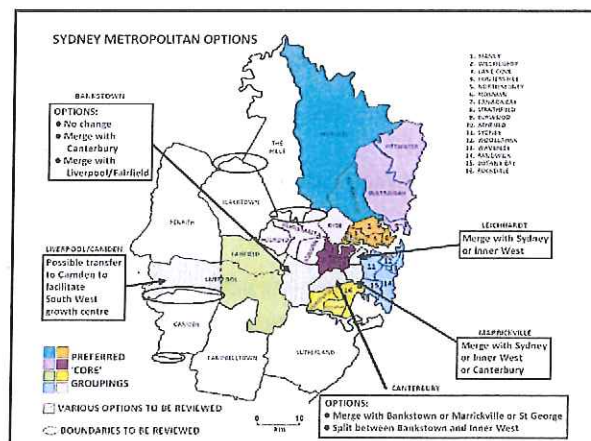
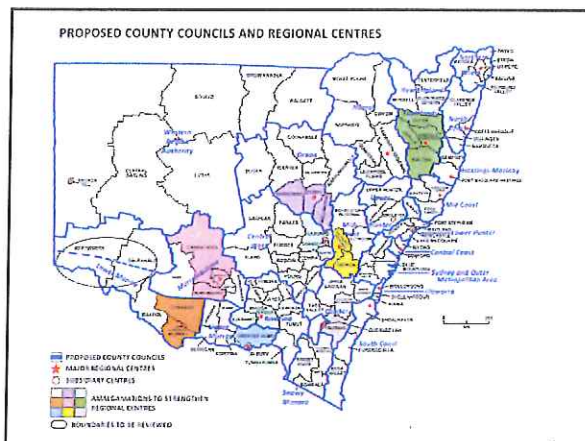
- Introduce a requirement for regular 'best value' service reviews
- Develop a consistent data collection and performance measurement system for NSW councils (cf Victoria)
- Upgrade internal and performance audit processes
- Commission a review by IPART of the regulatory and compliance burden on NSW local government

Better Governance

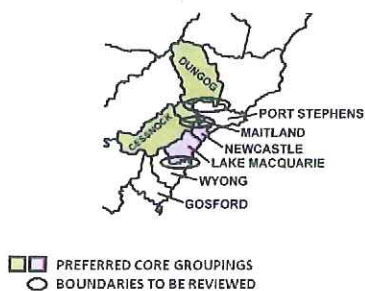
- Mandate ongoing professional development for councillors
- Strengthen the authority and responsibilities of mayors
- Require popular election of mayors in all councils with a population of 20,000 or more
- Provide additional governance options for larger councils, including a mix of ward and 'at large' councillors and a 'civic cabinet' model
- Take steps to improve council-mayor-General Manager relations

Structural Reform

- Establish around 20 'new look', multi-purpose County Councils
 - Critical to build LG capacity to partner State at regional level
- New option of elected 'Local Boards'
- Amalgamations to strengthen major regional centres
- Amalgamations of some small (in population) councils to improve sustainability, OR convert them to Local Boards
- Amalgamations in the Lower Hunter and Central Coast regions
- Reduce the number of councils in Sydney to about 15
- Major new cities of Sydney, Parramatta and Liverpool, each with populations of 600-800,000, to drive 'global city' and metro strategy implementation



LOWER HUNTER OPTIONS



Strengthening Remote Communities

- Establish a Western Region Authority to provide a new governance and service delivery system for the far west of NSW, based on a partnership between local, State and federal governments and Aboriginal communities
- Detailed options paper now released and available on the website



Clarifying Questions?

Finance and Infrastructure

Finance and infrastructure proposals

- TCorp ratings and outlooks plus Panel's 'councils at risk' (see slide)
- Fiscal responsibility – Delivery Program options (see slide)
- Mandatory qualified CFO
- Streamlining rate pegging (see slide)
- FAGs, Special projects fund from FAGs & R2R
- Regional Road Groups
- Local Government Finance Agency

Councils at risk

- TCorp report - FSR of Moderate with Negative Outlook or worse (all councils with a Weak FSR were included automatically)
- Projected population less than 10,000 in 2036
- Projected decline in population or only marginal growth
- Low rating base/high grant dependency

Note see page 12-13, Future Directions paper

MAP 'COUNCILS AT RISK'



Fiscal responsibility

- **Delivery Programs:**
 - Give effect to LTFFP & AMPs (IP&R guidelines compliant)
 - Progressively eliminate operating deficits
 - 4-8 year price paths – linked to infrastructure and services
 - Regular service reviews and consultation on service levels
 - Increased funding for infrastructure maintenance and renewal
 - Consider increased borrowing for infrastructure
 - Fair and reasonable distribution of the rate burden
 - Ongoing improvements in efficiency, productivity, financial management and governance

Note see Box 4, page 15, Future Directions paper

Streamlining rate pegging

- Within a framework of enhanced fiscal responsibility
- Increase in rates up to 3% above annual rate peg - Mayor and GM sign off that council is IP&R compliant
- IPART to conduct random audits and assess proposed increases greater than 3% above the rate peg
- Amend the LG Act to enable Minister to exempt a council from rate peg due to high performance
- Increased flexibility for Special Rates

Note see Box 6, page 17, Future Directions paper

Let's have a break

Governance, Performance Improvement and Audit

Governance, performance improvement and audit proposals

- Mandatory professional development for Councillors
- Enhanced role for Mayors (see slide)
- Standardised data collection & benchmarking
- Service reviews (see slide)
- Mandatory audit committees
- Strengthen internal audit
- Involving the Auditor General

Enhanced role of Mayors

- Principal member of council
- Civic leadership role – promote vision, engage community
- Political governance – propose and monitor committees and performance
- Lead strategic planning, oversee and present the budget
- Lead, manage, advise and work closely with the General Manager
- Lead partnerships with government agencies and key stakeholders

Note see Box 9, page 30, Future Directions paper

Victoria's 'Best Value' principles

- Services meet council defined quality and cost standards and meet identified performance outcomes for each service
- Services must respond to community needs
- Services must be accessible for intended community
- Achieve continuous improvement in service delivery
- Regular consultation on service delivery
- Report to community on achievements against these principles

Note see Box 7, page 22, Future Directions paper

Regions, County Councils, Local Boards and Amalgamations

Regions, County Councils, Local Boards and amalgamation proposals

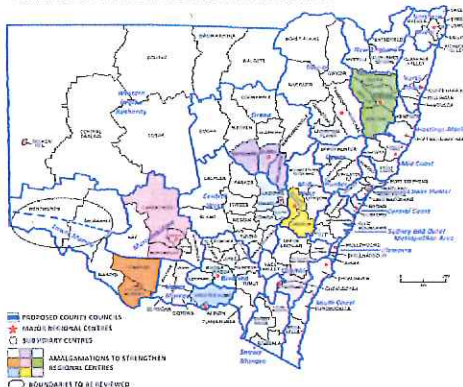
- Views on the regional boundaries? (see slide)
- Views on designated major regional centre?
- County Council options
- Core functions of County Councils (see slide)
- Local Boards option (see slide)
- Proposed amalgamations around regional centre and some 'councils at risk' – any takers?
- Incentives for voluntary amalgamation – what will assist? (see slide)

Factors to determine proposed regions

- Regional or sub-regional communities of interest reflected in existing arrangements
- Socio-economic links (Panel's cluster-factor analysis)
- Commercial viability of water utilities - 10,000+ connections (outside Sydney and Hunter Water Corporations)
- Regional centre with existing/potential strategic capacity
- Manageable geographic area and scale for regional planning
- Alignment where possible with State and federal agencies

Note see Box 10, page 34, Future Directions paper

PROPOSED COUNTY COUNCILS AND REGIONAL CENTRES



'New look' County Councils

- Existing LG Act provisions, but 'new look', multi-purpose bodies
- NOT a 4th tier – work alongside member councils
- LG Act provisions allow negotiation of structure, functions, funding and operations to best meet region's needs : no 'one size fits all'
- Board of County Council should include all mayors
- Sub-boards can be established for specific functions (should be expertise-based)
- Panel is keen to work through some 'case studies' over next 2 months for inclusion in final report

...continued

- Possible core functions:
 - Strategic regional and sub-regional planning
 - Regional advocacy and inter-governmental relations
 - Collaboration on infrastructure and service delivery
 - Management and/or technical support for water utilities
 - Road network planning and major projects
 - Waste and environmental management
 - Regional economic development
 - Library services
 - 'High level' corporate services

Note see page 34, Future Directions paper

Local Boards

- NZ/UK models: aim is to keep the 'local' in local government
- New option for small rural communities (generally <5000) and groups of suburbs in very large urban councils
- Also a transition mechanism for amalgamations
- Elected bodies (perhaps 5-7 members)
- Undertake community-level functions delegated from a council or County Council
- Range of functions can be tailored to local circumstances
- Study has been commissioned to provide detailed guidance on structure and operations, based on NZ/UK experience

Possible incentives for voluntary mergers

- No change is not an option: State government can refer powers to County Councils if action is not taken by councils
- More information on council performance and prospects
- Option of Local Boards to maintain local identity/democracy
- Allow increased number of Councillors during transition to a larger council
- Provide transition funding, low/no interest loans
- Conditional exemption from rate pegging
- Change management support
- Greater level of support for early movers

Note see page 58-59, Future Directions paper

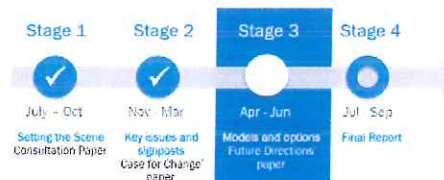
Implementation

Implementation

- Appoint a Local Government Development Board for a maximum period of 4 years
- Build on the new State-Local Government agreement to secure increased collaboration and joint planning between councils and State agencies
- Strengthen recognition of elected local government in the NSW Constitution
- Focus *Local Government NSW* and the Division of Local Government on sector improvement.

General Discussion

Thank you



Submissions are due by 28 June 2013
Go to www.localgovernmentreview.nsw.gov.au