Abstract

Councils are often constrained in the development of their coastal zone hazard management plans by the need to balance a number of conflicting and competing interests. The task becomes even more challenging when the likely impacts of climate change also need to be considered. A coordinated, clear and consistent policy framework would greatly assist councils in preparing these plans. Community understanding and acceptance of the need for action is also important. Given the limited resources available to local government, the enabling role of the State and Federal Governments can not be emphasized enough. These levels of government have implemented various measures in response to this issue, but they have had only mixed results in assisting local councils in working with their communities to address this challenge. This paper examines some of these initiatives, and how they have impacted on local government efforts towards responding to the challenge of planning for coastal hazard management. The emphasis is on the coastal management reforms introduced by the NSW Government in recent years, which have presented particularly difficult challenges for south coast councils.

Introduction

The coastal councils in the Southern Councils Group include Wollongong, Shellharbour, Kiama, Shoalhaven, Eurobodalla and Bega Valley. There are only two locations in this region where the threat from coastal hazards is perceived to be currently serious enough for them to be included in NSW-wide lists of hot spot or emergency locations. One is at Batemans Bay in the Eurobodalla Shire Council and the other at Mollymook in the Shoalhaven City Council. Despite the lack of an emergency situation elsewhere in the South Coast region, all member councils have been undertaking or intending to undertake coastal hazard management planning activities (Table 1). The question that may be asked is why do these councils consider it necessary to do so?

The answer lies in the responsibility that State Government has vested on local government in landuse planning and development control within their local communities. Councils have a statutory requirement to consider the effect of coastal processes and hazards, including those potentially arising under climate change conditions, in landuse planning and development decisions. In the South Coast region, councils are facing increasing pressure from the community to intensify development along a coastline which has until recently been mostly modestly developed. Balancing community aspirations against risk-averse planning decisions is therefore a particular challenge for these councils.

Council decisions on development applications in coastal risk areas can often be contentious and open to legal challenge, and the South Coast councils are conscious
of this possibility. The preparation and use of a coastal zone management plan to inform these decisions can provide some exemption from liability. Provision for this is made in the Local Government Act (1993), but its rigour has probably not been fully tested yet, which does not help in reducing council fears in this direction. A clear policy framework around how coastal hazards and climate change impacts should be assessed and then incorporated into landuse planning and development decisions would assist councils in undertaking these responsibilities with more confidence.

Table 1 Status of South Coast Councils’ Coastal Zone Management Plans

<table>
<thead>
<tr>
<th>Council</th>
<th>Year started</th>
<th>Completed (Y/N)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wollongong</td>
<td>2009</td>
<td>Y</td>
<td>Awaiting NSW Coastal Reform outcomes</td>
</tr>
<tr>
<td>Shellharbour</td>
<td>2011</td>
<td>N</td>
<td>Draft ready</td>
</tr>
<tr>
<td>Kiama</td>
<td>2012</td>
<td>N</td>
<td>Funding for flood study only</td>
</tr>
<tr>
<td>Shoalhaven</td>
<td>2004</td>
<td>Y</td>
<td>On public exhibition</td>
</tr>
<tr>
<td>Eurobodalla</td>
<td>2011</td>
<td>N</td>
<td>Awaiting NSW Coastal Reform outcomes</td>
</tr>
<tr>
<td>Bega Valley</td>
<td>2012</td>
<td>N</td>
<td>Engaging consultant</td>
</tr>
</tbody>
</table>

Planning for the management of coastal hazards is not an easy task for local government, especially when the impacts of climate change also need to be considered. Of the three levels of government, local government is often the least well resourced to take on this challenge. Moreover, local government is often also most closely involved with the community and is at the forefront of engaging with them when it comes to some of the more contentious planning outcomes. Therefore, clear direction and support from other levels of government are important. Whilst there has been some assistance on this front, the South Coast councils feel that many challenges still remain. This paper examines some of the more recent State and Federal Government measures, and how they have impacted on local government efforts in planning for coastal hazard management.

**NSW Government initiatives**

The NSW Government has had a long history in coastal hazard management work. The release of the Coastline Management Manual, and other associated documents, in the early 1990’s, for example, provided a wealth of information for councils to use in the early days of coastal planning. The recent issues have arisen as a result of the need to consider climate change and sea level rise within this management framework. From 2009 to 2011, the State introduced a series of reforms, in order to provide better direction to councils in this area. This was driven partly by council requests for clearer policy direction, in the face of increasing community resistance to planning for the management of coastal hazards under climate change conditions. Some of the measures introduced by the State over 2009 to 2011 have recently been revoked through a further review of the policy framework. The impacts of both of these sets of reforms are discussed below.

**Policy Reforms over 2009 – 2011**

A suite of measures were introduced over this period to amend the Coastal Protection Act (1979) and other supporting information. This included the release of the *NSW*
Sea Level Rise Policy Statement (2009), the Guidelines for Preparing Coastal Zone Management Plans (2010) and the NSW Planning Guideline: Adapting to Sea Level Rise (2010). Other documents to support the reforms were also made available or were in the pipeline. Even though the reform process was not fully complete, councils which had already started their planning work were advised to continue to develop their coastal zone management plans, and meet the policy framework to the extent that they could.

Some South Coast councils’ coastal zone management plans were prepared in the period of these reforms. The feedback on these plans showed that a number of policy framework measures, which councils were required to use, were the issues that were of most concern to the community. Much of this related to the management of existing development, and in particular, the management of private property. Whilst the management of new development in previously undeveloped areas appeared to be less of an issue, it was the implications for existing development that were of most concern. Some of these issues have been dealt with by the further reforms announced by the State Government in September 2012, and therefore these issues may seem no longer significant. Nevertheless, for an awareness of the policy matters that presented a challenge for councils, a discussion of all the issues raised by the community is useful.

The NSW Sea Level Rise Benchmarks

Under the previous policy framework, councils were required to use the State benchmarks for a rise in sea level of 40 cm to 2050 and 90 cm to 2100 above 1990 mean sea level. There was widespread community concern about the appropriateness of these values, with numerous claims on why these projections could not be supported. These included claims that recent measurements of sea level rise around Australia and elsewhere do not suggest these benchmarks were credible, and that IPCC had been continuously decreasing its projections since its first report. The requirement to use these benchmarks has now been revoked by the State, which will no doubt result in new issues for councils, some of which are discussed in another section of this paper. However, given the level of community resistance towards this measure, questions could be raised on whether there was adequate effort by the State Government in making the public understand the rationale behind the benchmarks when they were first introduced.

Methodology to determine Hazard Extents

The community also questioned the methodology used to delineate the coastal hazard areas, particularly those for the 2050 and 2100 timeframes. Whilst the determination of hazard extents for the current and future timeframes is essential under the Guidelines for Preparing Coastal Zone Management Plans, not much detail is included on the data and methodology to be used, thereby exposing the methods used to continuous conjecture and debate by the community. Other supporting documentation within the policy framework recommend the use of the controversial Bruun Rule for estimating shoreline erosion and recession, but little information is available on assessing ocean inundation or geotechnical instability. This results in these matters being left to the discretion of council consultants, which can result in different outcomes for different council areas. This is added ammunition for the community to use in challenging the outcomes.
Section 149 Planning Certificate Notations

The need to notate Section 149 Planning Certificates with coastal hazard information was another requirement within the policy framework. Some South Coast councils took this requirement on board and placed coastal hazard notations on all affected properties. There was strong objection from the community to this development, and concerns were expressed about the fairness of this, given the uncertainty associated with the hazard assessments. They believed that the notations are impacting on their property prices and insurance premiums, and questioned whether they would be compensated if future reviews removed this constraint from their properties. The possibility of taking class action against councils was also raised.

Planned Retreat as a Management Approach

The community is thoroughly against planned retreat as a management option in areas with existing assets, and in particular in residential areas, claiming that the prospect of planned retreat and potential property acquisitions is causing them great anxiety and stress. In view of the strong sentiments expressed about this option in the South Coast region and elsewhere in the State, councils are questioning whether planned retreat was fully explored as a realistic management option by the policy developers. Whilst the policy framework does not make any specific recommendations on any management option in any location, the need to protect and preserve beach environments and amenity is one of the other objectives that councils must meet in preparing coastal zone management plans. With the current challenges facing beach nourishment in NSW, councils are bewildered as to how they can preserve beaches, as well as protect beachfront properties.

Public and Private Interest in Cost Sharing

The policy framework allowed for landowners being levied a service charge for the maintenance of any coastal protection works constructed to protect private property. The community has questioned the fairness of these arrangements, particularly where other back beach assets are also afforded protection as a result of these works. They feel that all those who benefit from the measure should be required to share the cost. In addition, landholders, in areas where planned retreat is suggested, have questioned why they alone must bear the cost of this action, when the entire community would benefit from the beach environments and amenity that is preserved, as a result of any potential retreat. The cost sharing arrangements therefore appear to be another matter that may need to be revisited.

Property Risk and Response Category Lists

The requirement to identify property risk and response categories, including those for future planning timeframes, was another issue of concern to the community. The inconsistency in the policy documents in regard to the requirements for this did not help councils much either in trying to meet this requirement. The State Government advice at the time was that it was the requirements under the Guidelines for Preparing Coastal Zone Management Plans that needed to be complied with. This required a decision on risk and response category for all properties, regardless of the timeframe in which they were affected. The community questioned the need and fairness of doing this for
properties that may or may not be affected in the future, given the uncertainty associated with the hazard assessments.

**Planning Guidance in Coastal Risk Areas**

How coastal risk information is to be translated into planning and development control has been and still is a big challenge for councils. Even though the *NSW Planning Guideline: Adapting to Sea Level Rise* was a good start, it did not fully address the challenges associated with redevelopment in areas at risk in the future. This is particularly so in the context of using the planned retreat approach in trying to protect and preserve beach environments, as required under the policy framework. The use of conditional consents that are time or trigger based around a risk event has been suggested, but how these measures would work in practice has not been clarified, and needs further assessment.

**Reforms since September 2012**

In early 2012, a media release announced the formation of a NSW Ministerial Taskforce to further review the State's coastal management policy framework. This was indicated to be in response to community representations from various parts of the State on issues such as those discussed in the previous section. In September 2012, the NSW Government announced policy changes to address some of these concerns, and further reforms have been promised. While South Coast councils are yet to be fully briefed about the implications of these changes on the work they have done so far, they are raising some preliminary issues which need to be considered. These are discussed below.

**The NSW Sea Level Rise Policy Statement**

One of the major changes is the revocation of the NSW Sea Level Rise Policy Statement, and the removal of the requirement for councils to use those benchmarks in preparing coastal zone management plans. Councils are advised to use their own benchmarks, for which technical advice may be arranged by the State Government at some time in the future. The questions that arise from this are: (1) Do councils have the necessary resources to do this on their own until such time that this technical advice can be made available?; (2) If the community can challenge the State benchmarks, which were prepared with all the resources at the State’s disposal, how would council benchmarks stand up to this scrutiny?; (3) How will the use of their own benchmarks impact on the exemption from liability provision that currently applies to councils?

**Plans to focus on current hazards**

The media release announcing the reforms suggested that coastal zone management plans are to focus on current hazards. If this is the case, then (1) What is the reason for advising councils to develop their own Sea Level Rise benchmarks?; (2) What would be the legal status of a coastal zone management plan, in relation to the management of future hazards associated with sea level rise, if councils do decide to include sea level rise assessments in these plans?; (3) If there is no legal status, then
what will provide the legal support for the control of development or redevelopment in future coastal risk areas?

**Section 149 Planning Certificates**

Clarification on coastal hazard notations that can be placed on Section 149 Planning Certificates under the Coastal Protection Act (1979) has also been promised. However, it should be noted there are also certain obligations on councils in regard to Section 149 notations under the Environmental Planning and Assessment Act (1979). Some South Coast councils have taken action on this matter in view of their obligations under the Environmental Planning and Assessment Act rather than any coastal management legislation. Any conflicts that arise from the application of these different acts will need to be sorted out.

**Temporary coastal protection works**

The reforms are easing landholder restrictions on the use of temporary coastal protection works to protect their properties. Where placement on private property is concerned, it appears there are no restrictions on the length of time it can remain, or the number of times it can be used. If this is indeed the case, then (1) what incentive will there be for landholders to pursue longer term management options, such as those included in a coastal zone management plan?; (2) what would be the value in councils preparing coastal zone management plans?

**Federal Government initiatives**

The Federal Government has had its own program of activities to address the risks to our coast from coastal processes and hazards, especially those arising from climate change. These generally have not had a direct impact on South Coast councils in their coastal hazard management planning activities. Some that have had some influence are discussed below.

**Local Adaptation Pathways Program**

Under this program, funding was provided to councils for them to assess, prioritise and prepare a plan to address the risks from climate change. Three of the South Coast councils (Wollongong, Shellharbour, and Kiama) benefitted from this program, which helped to put climate change issues on their agenda. The risk from coastal processes and hazards was given high priority in these assessments, providing another motivation for these councils to embark on coastal zone management planning activities.

Inquiry by the House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts

This Committee’s report *Managing our Coast in a Changing Climate: the time to act is now* (2009) was seen as an important step in crystallizing the issues facing the nation,
including the need to assess the role of local government in coastal management and its capacity to deliver on its responsibilities. The release of the report generated some hope within member councils that it would lead to recognition and addressing of the needs of local government. Limited development on this front has been somewhat disappointing.

**Climate Change Risks to Australia’s Coast – A First Pass National Assessment**

As a higher level assessment to identify coastal risk areas on a national scale, this initiative was seen as useful. However, its scale down to the local government level and the way its outcomes were communicated to the public has not always been very helpful. The first pass assessment was carried out using very approximate methods, and other finer scale assessments were expected to be undertaken at a future stage. Therefore, the value of downscaling the first pass assessment to the local government level, to the extent of counting the number and type of properties affected, has to be questioned. Often these numbers were communicated to the public without adequate explanation of the qualifications attached to the assessment, and this created confusion in areas where councils were generating more detailed and finer scale assessments. Better coordination with these councils would have avoided some of these issues.

**CSIRO Coastal Cluster**

Community resistance and scepticism towards climate change and coastal planning has been a major challenge for member councils. The work by the CSIRO Coastal Cluster on their project: “Barriers to the application of science in coastal zone management for climate change” is attempting to address some of these issues. The Southern Councils Group Natural Resource Managers Committee is liaising with the University of Wollongong on this project. Further collaboration to broach the identified gap between science, policy and the community is going to be necessary to reconcile current perceptions and attitudes to coastal hazard management.

**Where to in the future?**

Some South Coast councils have expended substantial resources towards preparing coastal zone management plans, whilst others are in the process of doing so. With the numerous demands that are placed on the limited resources at their disposal, these councils can ill-afford to continue to expend further resources on coastal planning under an environment of continuously changing policy direction. Therefore the South Coast councils hope that the reforms currently underway at the State level, and future Federal level initiatives will: (1) lead to a policy framework that clarifies the role and responsibilities of local government in coastal management, and ensure that these are in keeping with the resources at councils’ disposal; and (2) provide direction to them on what interim provisions will there be for addressing coastal risks in planning and development control, whilst the revised policy framework is being developed.