

The Secretary,

The House Standing Committee on Climate Change, Water, Environment and the Arts.

Inquiry into climate change and environmental impacts on coastal communities

Submission by Barry Laing

Introduction and background

This submission is intended to raise the Inquiry's awareness of the threat to coastal communities posed by the NSW government's planning arrangements for the coastal zone. Changes made by the NSW Department of Planning in the past three years have weakened controls on coastal development which would have protected coastal communities from increased risk from climate change.

The situation will be outlined by using the example of Catherine Hill Bay (CHB), a coastal landscape and community 100km north of Sydney just south of the entrance to Lake Macquarie. The landscape lies within Lake Macquarie City on the northern side and Wyong Shire on the southern side. The population of the township is around 150 in a village with many heritage aspects recognised by National Trust and various planning controls at State and Local Government levels. The village and its surrounds have undeveloped headlands, beaches, coastal wetlands, heath and forest (see Fig.1, below). CHB sits partly within the Wallarah National Park and the Munmorah State Conservation Area and also has several threatened species or plant communities protected by Federal controls.

This landscape is under threat from climate change but also from two development proposals, one at the southern end of the township proposed by Rose Group and one at the northern end proposed by Riotinto/Coal and Allied (shown as white areas in Figure 1). Both proposals have been rejected by local government or the state Land and Environment Court as contrary to coastal policy and other planning instruments. Both have been placed by the state Minister for Planning into a newly-created development category which can exempt them from any state and local coastal planning controls. This leaves the coastal community of CHB at the mercy of a planning process which is currently under public challenge as subject to influence by vested interests.



Fig 1 This photo from Google shows Catherine Hill Bay. Note the catchments, village areas and wetlands. The white overlays show the proposed housing under the two development proposals.

My interest in CHB and its adaptation to climate change is very personal as well as coming from the perspective of community and national interests. My professional training was in geology and geography, which provided me with some understanding of coastal dynamics and climate change. My parents have owned 2 Clarke St CHB since 1965 and lived there since 1977. I have been either a part-time resident of or visitor to CHB for 44 years, and I want to protect the unique community character, scenic amenity, heritage and conservation values for which I go there and which will be my inheritance, and which are under direct threat from climate change. I support the Catherine Hill Bay Progress Association in bringing the village's concerns to the committee.

Impacts

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

There are many management and protection policies applying to the CHB area. They are supposed to be preparing the coast for the challenges of sea level rise and climate change. Even without other changes, these two challenges are enormous. The additional threat posed to this coastal zone by the current development proposals is best summarised in the following, quoted from the Lake Macquarie City Council's objection of October 2007 to the Rose Group development (page 3):

... the development ... remains inconsistent with the NSW Coastal Policy 1997 and Coastal Design Guidelines for NSW. Both these documents require development to avoid or minimise impacts on environmentally sensitive coastal areas and to protect the conservation values of coastal land. In particular, the NSW Coastal Policy requires undeveloped headlands to be protected, with only minor development for essential public purposes being permitted.

... the revised Plan ... proposes significant development adjacent the Headland's northern cliff face.

1. Inconsistencies with Local Planning Policy

- 2.1 *Significant urban expansion at Catherine Hill Bay is not envisaged by Lake Macquarie's Lifestyle 2020 – A Strategy for Our Future, due to the village's remoteness from existing centres, a lack of services and its heritage and environmental values. Instead, Catherine Hill Bay was intended to remain as a unique "hideaway" village.*
- 2.2 *Consequently Lake Macquarie Local Environmental Plan 2004 (LM LEP 2004) did not provide for urban expansion at Catherine Hill Bay outside the existing village subdivision, which is zoned 2(1) Residential. The coastal land, including the Headland, is zoned 7(4) Environmental (Coastline) Zone to accommodate the natural coastal processes and to conserve and enhance the scenic and natural values of the coastline. The remainder of the area is zoned 7(1) Conservation (Primary) Zone in recognition of its environmental significance and conservation values.*
- 2.3 *The Lake Macquarie Coastline Management Plan (CMP) provided the basis for some aspects of LM LEP 2004, particularly the minimum width of the 7(4) Environmental (Coastline) Zone. The CMP found "the upper limit estimate for the beach component of the Coastal Impact Zone is 100 metres from the current back beach escarpment" and "the upper limit estimates for cliff recession is typically 10 metres back from the an existing cliff face" but could be more in some areas. To establish the boundary of the Coastline Protection Zone, the CMP used the following criteria: "Landward limit of the Coastal Impact Zone plus a 30 metre ecological buffer and a 10 metre wide section for establishment of the coastal walk with additional allowance being made for areas overlying sea caves or potentially unstable coastline features such as steep slopes."*
- 2.4 *Development Control Plan No 1 – Principles of Development (DCP1) identifies Catherine Hill Bay within 'Scenic Management Zone A'. This category is assigned to areas of the highest scenic quality which are of critical value to the scenic image of the City and the most vulnerable to loss through development. Development in these areas should be designed to complement, maintain, and enhance the scenic value of the area and its features.*

The revised Concept Plan remains inconsistent with the above Local Planning Policies as it proposes to locate significant urban development:

- *within the coastline protection zone and highest scenic management zone; and*
- *in an area which has not been strategically identified as suitable for urban expansion.*

This summary illustrates the many policies and planning controls to which this typical coastal location is subject. The controls are many and complex and represent the outcomes of decades of negotiations between stakeholders. As such they are a valid and widely supported set of controls, which if respected will assist in managing the adaptations necessary during climate change.

However the impacts of climate change will be impossible to mitigate if all these local controls are removed. The existing policies should be maintaining state readiness for the adaptations necessary due to global warming. However under changes to the state's planning system currently being legislated, ministerial discretion can be used to treat projects such as those at CHB as *state significant*, which removes the necessity for them to comply with existing state and local planning instruments. The key point is that there is no public accountability in the minister's decision to treat a project as state significant, yet from that moment on there is no recourse to stop the project or to modify it, other than a non-binding consultation process.

In these projects, the minister has the power to override planning instruments regardless of advice from the state planning department, expert panels considering the project, other departments, statutory authorities, local government or community. There is no legal provision for appeal against the minister's decision to approve a

project. In the past couple of years the minister has shown great readiness to make unilateral decisions and has done so in over 95% of projects treated in this special way.

In this planning environment, the NSW Coastal Policy is treated with disregard and due processes to protect the coastal zone are being systematically overridden.

The CHB project proposals both directly change the catchment-coast-ocean continuum. Their location, scale and design impact on clifftops, bushland, catchment, SEPP14 coastal wetlands, coastal heath and adjacent forests, as well as low-lying housing and the heritage townscape. However, both have been placed under the minister's decision-making power. Despite the myriad of ways in which they both contravene coastal policy, they are both close to being approved by the Minister. He has made his intentions quite clear from the outset by deciding to call the projects in as state significant (which removed from all others the power to stop the projects) after it was established that they contravened coastal policy as well as many other planning instruments.

The National Trust regards CHB as a test case for coastal protection, which they see as threatened by the current planning regime of NSW. On their website they state:

*Changes to the planning system now threaten many coastal landscapes and other areas, including CHB, which we had believed were made safe from unsympathetic development by policies such as the state's Coastal Protection Policies. Under **Part 3(A) of the Environmental Planning and Assessment Act** the Minister for Planning has the power to override environmental and planning policies and decisions by declaring a site 'state significant'. Part 3(A) may be invoked to green-light the proposed developments at CHB.*

(<http://www.nsw.nationaltrust.org.au/campaigns/chb/>)

To summarise, the ad hoc, project-based decision-making which the current NSW planning legislation encourages will not support the systematic implementation of management policies applying to this part of the coast. There is no power to protect coasts in NSW from any impacts, whether of climate change or of inappropriate development, unless permitted by the minister's whim. There is a need for national action to ensure that the NSW Planning Minister's discretionary powers do not threaten a coherent national response to climate change.

The environmental impacts of coastal population growth and mechanisms to promote sustainable use of coastal resources

This aspect of the inquiry is most pertinent to the CHB situation. Unless the conservation of village, coast and catchments prevails, the local population will increase ten-fold within a few years. The effect on the area's two catchments and estuaries of such an increase have not been addressed at all in the development proposals.

With the current population of CHB, climate change will affect a small number of families. If the developments go ahead the negative effects will be multiplied dramatically.

The impact of climate change on coastal areas and strategies to deal with climate change adaptation, particularly in response to projected sea level rise

Using the CHB example, the most obvious impact will be the storm surge intrusion into housing which is currently out of reach of storms. Changes in sea level combined with tides and severe weather will undoubtedly increase risk of erosion and salination damage to beach, cliffs and dunes. It is problematic that the likelihood of this damage and the timing of such events is difficult to quantify, as is even simple factors such as elevations in the local area!

The four photos below illustrate a part of the southern end of the village, stretching from about 25 metres behind the rear beach dunes back to the creek's catchment hundreds of metres inland. All is currently just 1-3 metres above high tide.



Such close proximity of the housing in photo 2 to the sea (in photo 4), horizontally and vertically, puts it at greatest risk of the effects of rising sea level. This is serious enough, but additional risk comes from the Rose Group development proposal in this creek's catchment (rear of photos 2, 3 and 5). This would clear many hectares within the catchment, to be replaced with paved areas and housing. The consequences would include greater risk of flooding, siltation and damage to the wetland habitat. So this part of CHB would suffer from both climate change impacts and overdevelopment effects.

A much larger protected wetland behind the beach in the Munmorah State Conservation Area, immediately south of the Rose Group project, would suffer the same double impact (see figure 6).



6. SEPP 14 Wetlands south of CHB under double threat

In the northern end of CHB, similar compounded impacts are likely. The Coal and Allied Catherine Hill Bay Concept Plan Nov 2007 page 15 has a diagram showing the 100 year ARI maximum flood plain. Copyright prevents me from showing it. The flood plain is approximation of the extent of combined storm surge and flooding risk at present. This area would be the first affected by increased storm surge flooding due to climate change. It covers a large part of the vacant land in the existing village as well as some of the proposed development's housing area.

This 100 year flood area of CHB, which would be first affected by increased sea levels, is exemplified in the areas shown in photos 7 and 8 below. Both wetlands (fig 7) and housing (fig 8) are at risk.



7. Coastal wetland, North end of CHB beach and about 200 metres from housing



8. Village (North end) adjacent to 100 yr flood zone 10 metres to right of view

An early, ancillary impact of climate change may be that property and health insurance risk is recalculated by insurers and charged to high risk locations on a user-pays basis rather than by mutual funding. That would severely impact on some CHB homeowners and possibly make the new housing developments uninsurable.

A second major impact will be the effects of the poleward movement of species in response to habitat warming. In particular, arthropod vectors of diseases formerly found to the north of NSW or tropical Queensland will move south to CHB. The SEPP 14 wetlands to the south of the village and the wetlands next to the northern part of the village (in figures 2, 6 and 7) will become at risk of harbouring arbovirus and parasitic diseases. The likelihood and timing of this needs to be quantified by research, which has not been carried out as part of the development proposals.

In vulnerable coastal communities such as CHB, residents and local interest groups have very sparse information to help with action planning in response to threats such as those outlined above. There is a strong need for publicly available national coastal technical data and information to be used in decision-making. It is also necessary so that stakeholders can argue on facts, against inappropriate development and for protection of existing assets from climate change. It would be too late if the residents found out the quantum of increased risk, only by actual damage to properties and/or health.

Governance and institutional arrangements for the coastal zone.

There is a need to bring in 'big-picture' coordination of governance at federal level. This is needed to prevent the fragmentation of responsibilities to adapt for the threat to coastal communities nationally, from the effects of climate change. Recently Australia mobilised dramatically against terrorists, but the insidious threat of climate change will impact on far more people than any terrorists have ever done, so greater mobilisation is needed now. In the case of CHB, coordination of action is needed to delineate risks and adapt current and future habitation so that the village is safe and sustained.

I suggest that the Federal authorities need to be empowered to make war-like preparations. This could be initiated by bringing in a common agenda for all ministerial councils, to agree on federal powers to protect Australia from this national threat.

Conclusion

The example of the coastal community of Catherine Hill Bay illustrates the need for federal oversight of all coastal planning at the least, and possibly federal direct control, in order for Australia to adapt with intelligence to protect the community's sustainability in the face of pressures from climate change and development.

I also support the recommendations in Professor Thom's submission to this inquiry. His well-recognised technical expertise, wisdom, impartiality and substantial experience in this arena should guide us all.

Barry Laing