

**The New South Wales Experience**  
**New Zealand *Resource Management Act* Conference**  
**30-31 May 2007**  
**Keynote Address**  
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Of critical concern in managing natural resources of an attractive coastal region is the degree to which governments wish to interfere with market forces. In a capitalistic society we rely heavily on choices made by individuals and corporations to invest in activities which will generate wealth. Much of our coastal economies have been, and will remain, in the hands of those who seek to gain from investment in coastal real estate, tourism and ancillary industries. Yet we are alert to phrases such as “death by a thousand cuts”. We observe examples from other countries where unplanned over-development has created environmental nightmares. Potentially these places lose their economic strengths as environmental conditions degrade and people choose other places to live and recreate (and abuse?).

The coast of NSW is not immune to effects of massive private sector investment especially since the 1970s. However, it is the Gold Coast and Sunshine Coast of Queensland, which has experienced the incredible pressures of extended real estate growth. Even on a world scale this region highlights how far a coast can be transformed with or without government assistance.

Our knowledge of natural systems and the way economic and social forces function, in attractive coastal regions, makes us wary of unfettered exercise of market forces and property rights. But there are forces of resistance that operate globally, nationally and locally. They seek to counter what many see as the greed and ignorance of developers and protect environmental assets from further degradation and abuse by advocating state intervention.

In this address I want to demonstrate how difficult it is for governments of varying political persuasions to manage market forces driving coastal development. Let us assume two pressures will operate over the next several decades: one is population growth accompanied by demographic change; the other is global warming. Both pressures will operate at local and regional scales with varying degrees of uncertainty along the entire NSW coast and into SE Queensland. They will require decisions that will impact on the way natural resources are managed and on how landowners and developers will respond. To make such decisions is important for the nation because the coast is, as many have argued, a unifying image in Australian culture. Yet it is a landscape that registers the tensions and changes in an egalitarian society.

But first a little history. The natural environment of the NSW coast is extremely attractive for contemporary living. Golden sandy beaches, abundant estuarine waterways, majestic cliffs

and headlands, a well-watered hinterland, rich biodiversity and warm oceanic waters; these are natural attributes which will continue to attract people.

Since the 1860s successive state governments have promoted closer settlement. At first these settlements were linked to waterways and were based on primary industries. The emergence of a “beach culture” after World War I and improved transportation and individual wealth, especially after World War II, led to growth of holiday and resort towns. Sand mining opened new areas whilst creating an environmental consciousness that later embraced water pollution, habitat loss and urban sprawl.

All 5 local councils south of Sydney and all 17 councils north of Sydney have experienced sustained population growth of 1 to 2% or more since the 1970s largely concentrated in towns and villages close to the sea. This is the so-called Sea Change phenomenon. It is based on what some call “amenity migration”; there is little or no primary or secondary industry growth in these places.

How have governments reacted to such changes? First of all under the Australian constitution the federal or national government has had little to do with coastal management with some minor exceptions. State governments possess the powers. Local governments, as creatures of the State, have delegated roles and responsibilities which vary from state to state. Since 1919 in NSW, local councils have played a major role in land use planning. Under the Local Government Act (1919, revised 1993) they were able to foster local growth, local industry, local jobs and of course local rate income – all this was seen as “progress”. Many local councils were dominated by business interests including those in real estate. So historically, the scene has been well established for land to be subdivided for housing and tourism. This included old dairy lands, headlands, dune landscapes that had been mined and lake foreshores. Canal estates were carved out of estuarine wetlands. People poured into SE Queensland and coastal NSW with the active encouragement of local councils and, until recently, with limited planning control from state government agencies.

It must be noted that past decisions of state and local governments stretching back over 100 years have left damaging legacies for current and future generations to manage. Let me list some of these:

- River entrances were “trained” with breakwaters to create safe passageways for shipping, but onshore sand transport continues to choke the entrances potentially threatening the future of the recreational boating industry and creating local demands to frequently dredge the sand bars;
- Drainage canals were dug into backswamps of deltas to facilitate more pasture and flood run off, but these canals cut into acid sulfate soils liberating sulfuric acids and other poisons to fish and oysters; who is responsibility for mitigating these degraded lands?
- Sand miners expanded the distribution of weeds along dunes and onto headlands (e.g. bitou bush) the cost of which in biological and financial terms is escalating even in coastal National Parks;

- Canal estates were allowed to mutate and infect waterways limiting access, polluting the waters with nutrients and creating a contingent liability for governments as sea level rises; and
- Foreshore property owners have been allowed to build seawalls inducing loss of beach width and amenity; how long can such actions be tolerated and how can we protect public beaches from the actions of shoreline property interests as sea level rises and beaches recede?

These five examples of past decisions must be placed in today's context of greater community and political awareness of the need for the State to manage in the broader public interest. How did this awareness arise? First, the devastation by sand miners in the '60s and '70s was a factor in the expansion of coastal national parks (now 35% of the NSW coast), and acquiring lands for public open space and public access (Coastal Lands Protection Scheme, 1973). Second, the storms of the '70s led to establishment of a state government coastal branch in the Public Works Department for beach and estuary improvement. Here is an example of strong central intervention in the affairs of local councils. Third, loss of biodiversity was seen by state agency and local community groups as requiring attention leading to mapping, habitat restoration and protection (e.g. coastal wetlands protected by State Environmental Planning Policy or SEPP No.14 in 1984), canal estate ban in 1997 (SEPP No.50), and the various programs of the state National Parks and Wildlife Service. By the mid 1990s even the Federal Government saw an opportunity to contribute to local and regional "Dunecare" and "Coastcare" projects to help restore coastal biodiversity in association with state and local council authorities. Fourth, there has emerged a strong personalised evocation that the beauty of the natural environment along the coast had meaning; a quality of life could disappear if the coast was allowed to be overdeveloped. This is highlighted in policies that aim to limit building heights and building on headlands in order to prevent the spread of Gold Coast style high rise development on the NSW coast (see SEPP 71,2002). And finally, reflecting on all these factors, the State Government in NSW in 1997 saw the need to have a Coastal Policy based on the principles of Ecologically Sustainable Development, which brought together the roles of agencies, local councils and community groups for improved planning and management. Victoria developed a similar approach around the same time.

Emergence and application of a Coastal Policy in NSW was linked to the role of the NSW Coastal Council. First established in 1979 under the Coastal Protection Act, it was disbanded in 1986 on the pretext that the Labor Government of the day did not want "coordination" of coastal planning and management by an advisory body. But it was reincarnated in 1989 by the new Coalition Government and remained in place till 2004 when it was again disbanded even though it had operated under a Labor Government since 1995. This history reflects on the key roles of Ministers and their senior advisors in Government in deciding whether it is "useful" to have an external advisory council or committee which has its own independent public profile. This is especially problematic to some in Government when that body has an integrating or coordinating function linked to multiple agencies, local councils, industry and environmental NGOs.

What the NSW Coastal Council did over the period 1989-2004 was to develop, support the implementation, and audit the 1997 Coastal Policy. It also conducted reviews and stimulated

the multi-faceted Coastal Protection Package 2001. The Policy and its offshoots (e.g. SEPP 71, Major Projects SEPP Schedule 2) and supporting planning activities conducted by different agencies (e.g. Coastline Management Plans), remain extant. The difference is there is no Coastal Council to report on their implementation to the NSW Parliament as previously required under the Coastal Protection Act 1979. A report to Parliament ensures a full public disclosure of the range of advice as per the objectives of the Act.

What are the current governance arrangements that now manage natural resources on the NSW coast? Of necessity I have to provide a grossly simplified picture of a very complex political and bureaucratic system. It is not only complex but it keeps on changing. Yet there are some positives which relate back to our history. Let me explain.

Within NSW there are four levels of institutional engagement in coastal management and planning; they connect or disconnect to varying degrees. At the grass roots level are local councils: 22 councils outside Sydney and 17 in Sydney have coastal communities. They operate under two main State Acts: Local Government Act 1993 and Environment Planning and Assessment Act 1979. Their decisions are often appealed to the Land and Environment Court. Section 733 of the L G Act 1993 removes liability from councils where they make decisions on development in coastal erosion and flood-prone lands in “good faith” provided they follow certain state guidelines and develop “management plans”. This imposes financial and technical imposts on councils which are often hard to achieve.

Councils also make statutory Local Environmental Plans (LEPs). These are now guided by a new generation of Regional Strategies, which are designed to replace out-dated Regional Environmental Plans (REPs). They cover the full range of land use planning based on projections of regional population growth and will be used by the Minister for Planning to direct councils on revisions of their LEPs. There are 6 such coastal strategies in various stages of development. They define new urban land releases and areas for natural asset protection, including agricultural land. Areas that may be vulnerable to natural hazards are to be designated on LEPs and steps taken to restrict development that may be at risk even to those hazards associated with climate change.

Regional strategies and LEPs will be subject to review every 5 years. This process, if implemented, will provide the State Government through the Minister for Planning with a direct opportunity to intervene in the way councils plan and approve developments on coastal land consistent with new information on population trends, economic conditions, transport and other infrastructure needs, and environmental dynamics such as rate of sea level rise under global warming.

The next (or second) level is the entity known as Catchment Management Authorities. These are newly created under the Catchment Management Act 2003. They have a responsibility to implement the Native Vegetation Act 2003 in non urban areas, and to carry out an investment program to support the maintenance and improvement of natural resource condition in their respective regions. Catchment Action Plans (CAPs) are used for these purposes.

The CAPs reflect standards and targets set by another newly created entity, the Natural Resources Commission (NRC). The NRC under its own Act (NRC Act 2003) replaced some of the functions of the defunct Coastal Council. Its audit functions are limited to CMAs. With the CMAs and CAPs comes a new player in regional NRM, the Federal Government. Two federal agencies, Department Agriculture, Fishery and Forestry (DAFF) and Department of Environment and Water Resources (DEWR), jointly support Natural Heritage Trust (NHT) investment in regional NRM delivery. This involves a bilateral agreement with two state government agencies: Department of Primary Industries and Department of Natural Resources now Department of Environment and Climate Change (DPI, DNR now DECC). Now we have a mechanism for Federal State funds to selectively support certain NRM outcomes (e.g. riparian revegetation on private land). I say selectively because the link across to water management on the one hand and strategic land use planning driven by regional strategies on the other, is not all that clear at the moment This may improve under new federal-state arrangements in 2008 which hopefully will give more weight to coastal and urban NRM issues, and the State Plan (see below).

The third level of coastal NRM and environmental management flows from legislation, regulations and policies of NSW state agencies. In NSW we tend to oscillate between hybrid organisations (e.g. Department of Infrastructure, Planning and Natural Resources or DIPNR and DECC) and more sectoral agencies (e.g. the former Public Works Department, and Department of Lands). Restructuring follows both elections and changes in who is Premier. Flow-on effects determine who manages what with impacts on budgets, skills (downsizing), and work programs. Some agencies strongly promote business investment and market forces. Others seek to regulate and control in the public interest. For instance National Parks are now the responsibility of DECC, an agency which both regulates and manages the environment, whereas crown lands are controlled by the Department of Lands, an agency tasked in part with providing a “fair and reasonable return” to Treasury through the sale or lease of crown land. These differences can be a source of conflict.

An experiment (2003-2005) to integrate land use planning, NRM and infrastructure investment in one agency (DIPNR) was stopped when Premier Carr resigned in August 2005. Now these three planning/management/investment roles are the responsibility of three different Ministers. Staff who once worked together under one CEO are now located in three separate bureaucracies. This can mean that the Minister for Planning using the EP&A Act and the coastal regional strategies may make decisions which do not necessarily reflect long-term NRM objectives. And the Minister for Infrastructure likewise may support an infrastructure investment which is not cognisant of the potential impacts of climate change. But this is about to change (we hope).

And so onto the fourth and final level. I refer to the State Plan developed under the direction of the new NSW Premier Morris Iemma in 2006. Here is where we see the emergence of an integrative model in public administration. This is new territory for NSW. It highlights the centralising powers of a proactive Premier seeking to deliver outcomes by ensuring his Cabinet colleagues are “singing from the same hymn sheet”. To the critics, the State Plan is still a vague wish list repeating past promises. To its advocates, it will achieve two things: one is to eliminate turf wars because of the clear focus on outcomes as set out in the Plan; and

two, provide a Cabinet process which coordinates actions listed in the State Plan by defining a “Lead” Minister/Lead CEO/ agency and associated “Partner” Ministers/CEOs/ agencies. A new Cabinet Standing committee will be established to ensure overall delivery of the Plan. An Environment/NRM component with priorities is included (e.g. Priority E4: better outcomes for native vegetation, biodiversity, land, rivers and coastal waterways, but ironically given the photos in the text, no explicit mention of beaches). The new Cabinet Committee will consider progress, policy and expenditure matters, and “for the first time in the history of the NSW Government, this new committee will invite individuals from outside Government to advise Cabinet” (State Plan, 2006, p. 142).

So given this complex overlay of public administration , let me return to the two driving pressures that will require some form of continued government intervention now and into the future. They are demographic change and global warming. The State Plan and the regional strategies say quite a lot on the former, but little on the latter. Until very recently climate change sceptics have dominated policy development in state and federal governments. New science (IPCC, CSIRO, university, and agency research) is commanding more attention on (i) potential impacts of climate change; and (ii) the need for adaptation strategies. A NSW Greenhouse Plan emerged through the work of the former Cabinet Office. This plan and future work will now fall within the portfolio of the new Minister for Climate Change, Environment and Water; he will be the “lead” Minister in this area. Land-use planning as it is linked to climate change stays with the Minister for Planning; he will be presumably a “partner” Minister on climate change and NRM matters.

One could argue that all this is an overly complex array of plans which may or may not deliver sustainable use of natural resources on the NSW coast. No one entity or single plan provides the answers given the historical legacy of public administration and political differences both within and between major political parties. It is a model which requires connection between plans; political commitment to achieve targets; capacity of those involved to undertake the necessary work as required by the plans and not some other agenda; and a budgetary process that offers financial incentives to councils, CMAs, agencies, community groups, research organisations and business to collectively deliver the long-term outcomes as set out in the various plans. Moreover, a fundamental tension may arise between different objectives. Why? Another goal of the State Plan is that “NSW is Open for Business”. This goal is in potential conflict with the integrated objectives of the Coastal Policy and perhaps the regional strategies and the CAPs.

The private sector will be encouraged by the State Plan to invest and create jobs. Along the coast this will be manifest in property and tourist developments. However, to manage growth and ensure impacts of climate change don't impact adversely on the investments and the environment, State planning/intervention in the market will be necessary. The house block that you want to sell to developers to sub-divide may not get the desired zoning for urban use. You may have to design your house differently adding to cost. And you may be required to designate a wide set back to allow for foreshore erosion. Add to all this is the likelihood that water supplies may not be adequate to sustain population growth further limiting land releases. We are currently rethinking growth projections based on new hydrological scenarios under global warming (e.g. Central Coast Regional Strategy).

Private landowners and corporate developers are not going to easily accept the continued deprivation of property rights by legislation or regulation. They will lobby. They will fight for compensation using the legal system, and they will engage their own “experts” to disparage arguments of governments seeking to achieve a higher level of public good under the principles of Ecologically Sustainable Development. Developers will always appeal to short-term political interests if they can demonstrate that their investments will create jobs.

So governments in Australia, federal, state, local (and CMAs) are faced with an incredibly difficult balancing act: how far can they intervene with market forces in order to protect and make indefinitely sustainable our natural resources in such an uncertain world whilst still fostering wealth creation? No doubt there will be frustrations, conflicts, tensions, winners and losers. What we have done in NSW is to develop a complex interlocking planning and management system which operates at many different levels. Future generations may have more to cope with if this system makes too many mistakes just as we have had to shoulder the burden of the abuses of past property owners and conniving governments. But our longstanding love affair with the coast is not going to allow for it to be covered in concrete although there will be places where high-rise developments, urban expansion and new infrastructure will occur. Where this happens, let there be sufficient controls to ensure sensitivity to the natural character of coastal places.

What are the key lessons to be learnt from the NSW experience?

First is the need to invest in multi-disciplinary science that can be readily applied to coastal planning and management. The science must embrace long-term observations, rigorous experiments and modelling of scenarios based on climate change projections. New technologies should be employed (e.g. Airborne Laser Scanning). Knowledge of demographics and economic and social factors that are driving coastal change must also be investigated (e.g. ocean economics program in California).

Second, it is important to establish a nationwide monitoring program of key natural resource indicators that can be consistently applied to all catchments and coast and marine systems. A new initiative by the federal government in Australia is to have the Bureau of Meteorology take over diverse state systems for measuring river flow and water allocations. It is also important to apply new science to monitoring coastal conditions such as nutrient fluxes. The work of the Healthy Waterways program in southeast Queensland using the report card approach is a useful model.

Third, there should be developed ways to communicate the implications of science to managers and planners who can then develop clear policy recommendations for government decision makers. Again new technologies should be used to communicate this knowledge to landowners, investors and community groups (e.g. Google Earth). Notification of flood and erosion risk to landowners and investors is also critical based on new information from climate change scenarios. The recently released Comprehensive Coastal Assessment (CCA) in NSW provides a methodology and information system for communication of integrated planning. The Coastal Design Guidelines (2003) published by the NSW Coastal Council is

another product which assists councils in communicating design criteria to developers by using local natural values to best advantage. The coastal management manuals put out by PWD in the 1990s (being updated) also offer important tools in management of vulnerable coastal areas.

Fourth, I can see advantages in having an independent Coastal Council with cross-sectoral representation which provides advice to various levels of government. The model used in Victoria with three coastal boards covering three parts of that state's coast is quite effective. These boards have membership on the Victorian Coastal Council. I found the experience of reporting each year to Parliament a very effective way of maintaining transparency when the NSW Coastal Council had that role (1998-2004). The California Coastal Commission is a similar model in operation since 1976.

Fifth, a way should be found that clearly links land use planning with natural resource management and government investment in infrastructure. Strategic planning must recognise the interdependence of all three components. The Southeast Queensland Regional Plan is an excellent model of integration with budget commitments to 2026. The NSW regional strategies started out that way, but are now more directed towards assisting local councils revise their statutory land use plans (LEPs) every 5 years.

Sixth, it is possible for the state to use its statutory powers in strategic and prescriptive ways to protect environmental assets on private land. A good example is the use of SEPPs in NSW; for instance SEPPs 14, 26 and 50 control coastal wetlands, littoral rain forest and canal estate development respectively. Even though the more integrative and general NSW Coastal Policy only offers matters for consideration under the EP&A Act 1979, it has been successfully applied in the court system to achieve outcomes that protect public interests. The Minister for Planning can and does have extensive "call in" powers under the EP&A Act 1979 for matters of state significance and critical state infrastructure (see Major Projects SEPP, Schedule 2 for coastal matters and SEPP 71 Coastal Protection). The Minister can also use funds in the Coastal Lands Protection Scheme to acquire private land through either voluntary or compulsory purchase of strategic sites (e.g. to secure public access to foreshores or to scenic sites). Again California operates a similar scheme (California Coastal Conservancy).

Finally, statute law must be clear enough for tribunals or courts to recognise public interests at times of uncertainty in the behaviour of natural forces under global warming. Property rights cannot be fully circumvented, but effective legislation, regulation and policy can be constructed which will limit the impact of private actions on the beauty and health of the coast, and public access to beaches and foreshores. An example occurred in 2002 with an amendment to the Coastal Protection Act 1979. In Part 4B it was possible to limit conditions of a landowner with title to mean high water mark under the modified doctrine of accretion to situations only when the landowner could demonstrate that accretion would be "indefinitely sustained". Such may prove difficult under conditions of rising sea levels induced by global warming.