

Chapter 1:

The Evolution of Coastal Management

1.1 Introduction

There is a mysterious attraction about the coast, something every beach and ocean lover knows. It's a powerful addiction that we've all been hooked on since first climbing a sand dune and squinting through the haze to the beautiful big blue. A timeless myth exists about the beach and the coast, a belief that our actions on the coast and in the coastal zone (land or sea) will always be temporary – like waves washing over footprints. Because of the coast's ability to constantly refresh and renew itself, there is a feeling that we (humans) can't actually harm it – the coast is impervious to our actions – and as such, we can act in any manner we choose. This myth has grown into a belief that because our actions on the coast are temporary, we can do whatever we like, because, ultimately, the ocean will be able to refresh itself (after Blomberg, 1982).

Reality, however, is something quite different. Population growth in the coastal zone has resulted in increasing competition for access to (diminishing) resources. The ensuing result has been conflict over uses and user rights (after Underwood and Chapman 1995, Clark 1996). In many areas, conservation and management of our coastline is in a very poor state and the finite nature of the coast and its ability to recover from human intervention is only now being realised (OECD 1991b, Underwood and Chapman 1995). In Australia, the deterioration of our coastal resources can only be understood within the context of coastal settlement and population growth in the coastal zone. This is the dominant paradigm for coastal planning and management today. Currently, 86% of our population (ABS 1998) lives within 30mins drive of the beach and we can expect many of the 11-15 million extra Australians predicted by the middle of the century to want to live near the coast (Bately & Cocks 1992, Davis & Weller 1993).

1.2 Special Nature of the Coast

The Coast as a Resource

Coastal areas contain some of the world's most diverse and productive resources, including intensive areas of complex and specialised ecosystems such as mangroves, coral reefs and seagrasses, which are highly sensitive to human intervention (Underwood and Chapman 1995). The range of resources in the coastal zone is greatly varied and includes fisheries, wildlife, surface and groundwater, sand and minerals, and forests (Feeny *et al* 1990). Often referred to as common-property, these resources have two important characteristics: the first is control of access; and the second is that each user is capable of subtracting from the welfare of other users (Hardin 1968;

Hanna 1990; Feeny *et al* 1990). These resources are prized for the many social, environmental and economic advantages they confer on users (OECD 1990a). People all over the world have concentrated on the coastal margins of continents for a variety of reasons, many of which have changed over time:

- The seas provided a source of food;
- Rainfall is generally greater and more reliable on the coast than inland;
- Coastal lands are usually suitable for a wide range of uses;
- The coastal climate is milder than the extremes found in the interior of the continent;
- Transport was initially easier by sea than across land; and
- Increased leisure time, resulting from greater affluence has changed working conditions and holidays by sea have become attainable (NSW Government 1989, OECD 1991).

Human settlement and continued population growth over an extended period of time have, however, heavily modified many of these areas and contributed to deteriorating environmental quality on local through to international scales (after Underwood & Chapman 1995). Because of increased population growth in and migration to the coast, access to resources is increasingly becoming an issue that requires careful planning. In many cases, the quality of the resources in many coastal areas has significantly deteriorated as a direct result of population growth and the continuation of traditional land-use practices (SOMER 1995, Underwood and Chapman 1995).

Environmental problems such as:

- the pollution of estuarine and coastal waters (WWF 1999, WWF 2000);
- declining marine and coastal water / sediment quality (SOMER 1995);
- loss of marine and coastal habitat (SOMER 1995);
- acid Sulfate Soils (Sammur 2000); and
- climate change and sea level rise (May *et al* 1998)
- all affect the sustainability of coastal resources in NSW and this effects where we live, the way we live and how we live.

For the purpose of this study, it is convenient to categorise coastal management issues as being of either a 'resource outcome' or an 'organisational process' nature (Englander *et al* 1977, Cullen and Sorensen 1986). While these categories are intentionally broad, they encapsulate the key issues for coastal zone management today and the key issues up for discussion in this thesis. These issues are:

- Population growth;
- Environment and sustainability;
- Management and decision-making;
- Public participation; and
- Access (after Cullen and Sorensen 1986, OECD 1990b, Brown 1996, Kay and Lester 1997).

An examination of these issues highlights the fact that living on the coast today represents something more than the prospect of food, clothing and shelter. A lifestyle by the coast has become synonymous with the great Australian dream.

The beach, not the bush, is the new Australian utopia. It's the beach that has become the focus of our imaginations, our desires, our yearning for a world different from the concrete-pavement universe that most of us inhabit for most of our lives. The beach today represents escape, freedom, self-fulfilment, the Right Path. It represents the way our lives should be (McGregor 2000).

The synergistic influences of the realities of everyday life and our imagination have become powerful forces behind our migration to the coast. This is a major component of the paradigm setting for coastal management today (after Dovers and Lindenmayer 1997, Dovers and Mobbs 1997).

1.3 Coastal Zone Management

Since the late 1960s, there have been extensive studies undertaken, programs devised, policies implemented and reviews undertaken specifically relating to the coastal zone. In this time, coastal management has grown to become an independently recognisable profession and “coastal zone management (CZM)” a recognisable phrase (Gilmour *et al* 1978, United States Government 1972). Coastal management, as a separately identified field of resource management has developed in a similar fashion to Natural Resource Management (NRM) in terms of the broadening of the terms of reference for examination (Kenchington and Crawford 1993, Kay and Alder 1999). The World Bank defines coastal management as

a process of governance that consists of the legal and institutional framework necessary to ensure that development and management plans for coastal zones are integrated with environmental and social goals, and are developed with the participation of those affected (Post and Lundin 1996).

There is broad-based agreement that an integrated and co-ordinated approach to management must be developed – one that takes into account the natural environment as well as economic, social and cultural issues (Holling *et al* 1978, Jacob 1994, Woodhill and Gore 1997). To a large extent, the National Strategy for Ecologically Sustainable Development (NSED 1992) has underpinned these principles. The concept of sustainable development came into prominence in the late 1980s as societies saw the importance of ensuring that the needs of the present are met without compromising the ability of future generations to meet their own needs (Thom 1999). According to the Strategy overview, Ecologically Sustainable Development (ESD):

means using, conserving, and enhancing the community's resources so that ecological processes, on which life depends, are maintained and quality of life for both present and future generations is increased (NSED 1992).

Background

The first comprehensive review of the practice of coastal management was the Stratton Report (1969), undertaken prior to the passage of the United States Coastal Zone Management Act (CZMA) (1972). The Report stated that although our understanding of the coastal zone system has improved markedly over the past 20 years, the pace and intensity of human activities requires greater understanding and action which will *"permit conscious and informed choices among development alternatives and provides for proper planning"* (Stratton Report 1969). Without this, *"protection of long-term values of the coast will continue to be thwarted by developmental interests."*

In their highly respected publication, Kay and Alder (1999) argue that coastal management today is concerned with the application of techniques that attempt to clearly focus the efforts of governments, private industry and the broader community onto coastal areas – part of the natural environment. The practice of coastal management, therefore, is often not confined to local areas or regions within States. Many of the key coastal management issues (as described in Table 1.1 below) are common across borders and between nations. As a result of these common issues, many nations face similar planning and management concerns for the coastal zone. Integrated Coastal Management (ICM) centres around ways to bring together disparate planning and management techniques and to form holistic and flexible coastal management systems (after Cullen 1987, Kay & Alder 1999). This implies an interaction between local, regional, national and global goals for how we plan, manage, live, work and recreate in the coastal zone.

Table 1.1 Common Factors Contributing to Pressure on the Coastal Zone

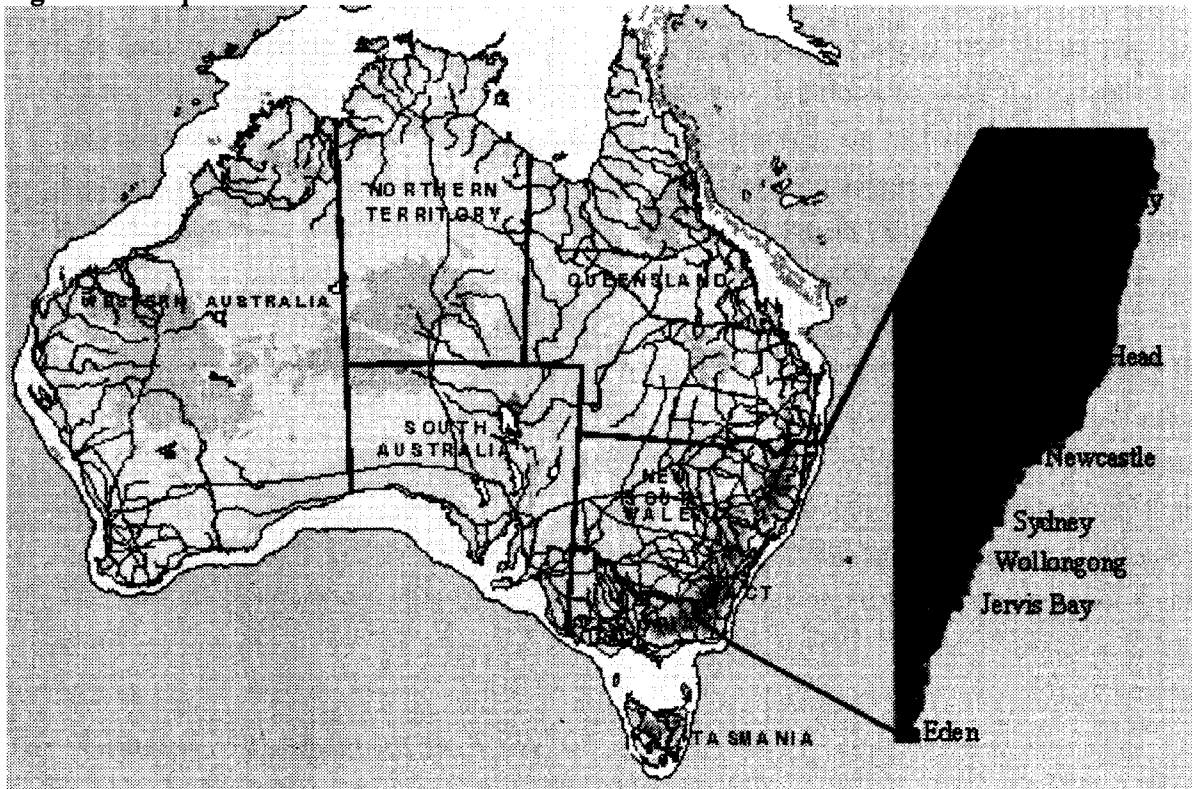
<ul style="list-style-type: none">• Population growth rapid urbanisation of the coast;• Pollution from residential, commercial and industrial activities;• Tourism development;• Resource allocation conflicts among users; and• Continued development in hazard prone areas

Source: OECD 1991b.

1.4 Description of the coast

The NSW coastal zone stretches 1,400 kilometres from Victoria in the south to Queensland in the north (see Figure 1.1 below). The NSW coastal zone consists primarily of sandy beaches backed by dunes, rocky headlands, mudflats and mangroves, lagoons and estuaries. The coastal zone of Australia contains a wide range of climatic, geographical and oceanographic regions, which accommodate a rich store of biological diversity. For these reasons alone the NSW coastal zone is significant on an international scale (Channell 1996a).

Figure 1.1 Map of Australia and the NSW Coastline



(Adapted from Austlig and the NSW Coastal Atlas)

1.5 Definition of the coast

Ketchum (1972) and Batisse (1990) argue that it would seem today that there should be no semantic ambiguity about the meaning of the word 'coastal'.

'The coastal zone is the band of dry land and adjacent ocean space (water and submerged land) in which land ecology and use directly affect ocean-space ecology, and vice-versa. The coastal zone is a band of variable width which borders the continent... Geographically, the landward boundary of the coastal zone is necessarily vague... The seaward boundary has been defined as to the extent to which man's land-based activities have a measurable influence on the chemistry of the water or on the ecology of marine life (Ketchum 1972).

In practice though, there is a vast degree of ambiguity over the definition of the coastal zone. There are three distinct definitions that can be used to determine the coastal zone:

1. A littoral, catchment or watershed based definition of the coastal zone (Ketchum 1972, Channell 1996b). The NSW Coastal Policy 1997 is partly based on a littoral definition with certain boundaries defined by tidal waters of coastal rivers to the limit of mangroves (NSW Coastal Policy 1997).
2. A cadastrally based definition often framed around political, administrative or management boundaries (Commonwealth Coastal Policy 1995, NSW Coastal Policy 1997). Parts of the NSW coastal zone are mapped in accordance '*with the line on the maps being taken to the nearest cadastral boundary and / or easily recognisable physical boundary, in consultation with local councils*' (NSW Coastal Policy 1997). Russell and Kneese (1973) and Kay and Alder (1999) argue for a broader rather than a narrower definition because the extent of the coastal zone will vary according to the nature of the management and scientific issues. This definition of the coast dominates ICM today. As such, there is a degree of flexibility in relation to the coastal zone and it may be based in part on a catchment (Victorian Coastal Strategy 1997, Draft Western Australia Coastal Policy 2001, Queensland Coastal Management Policy 2001) or even have boundaries that shift over time (United States CZMA 1972).
3. The third definition of the coastal zone, I believe, is somewhat more nebulous than the previous two, but no less important. Dutton *et al* (1997) argue that the coast is a state of mind. This 'values' based definition, is increasingly playing a key role for policy and program development in coastal management and decision-making today and is represented, for example, in the NSW Coastal Policy (1997) which recognises the 'spiritual' nature of the coast. This definition supports a more holistic interpretation of coastal management (after Evans 1996).

1.6 Coastal Management in NSW

Cullen (1982) argues that after a promising start in the late 1800s, coastal management had been neglected in Australia until the late 1960s mainly in response to coastal erosion, land-use conflicts and an obvious lack of coordination between public agencies. During the 1970's, however, concern started to emerge for a broader perspective than that adopted by local government to the planning and management problems that they were starting to face.

For over 20 years, the NSW Government has been developing CZM policy and implementing programs. During this time, there has been an extensive program of review at all levels of government, both nationally and internationally, on the effectiveness or otherwise of coastal management programs. The Commonwealth Government conducted at least 29 inquiries into coastal zone management or aspects of it, and various state governments have conducted at least

34 inquiries (RAC 1993). Table 1.2 (below) presents a summary of the milestones that have helped to define and characterise CZM in NSW.

Coastal Protection Act (1979)

The passage of the NSW Coastal Protection Act (CPA) in 1979 marked the beginning of specific coastal management legislation, policies and programs in the State. The objective of the CPA (1979) is *to protect the NSW coastal zone from increasing development pressures by providing an integrated and comprehensive approach to coastal planning* (cited in Cullen 1982).

Table 1.2 Coastal Management Milestones for NSW

Year	Report / Inquiry / Program / Document
1969	Stratton Report – blueprint for the development of coastal management policy in the USA
1972	US Coastal Zone Management Act
1977	Peter Cullen and Jens Sorensen – seminal article <i>Coastal Management Experiences in the United States and Implications for Australia</i>
1979	NSW Government – Coastal Protection Act
1980	Commonwealth of Australia - <i>Australian Coastal Zone Management: Report from the House of Representatives Standing Committee on Environment and Conservation (HORSCEC)</i>
1986	Stark K – Chairman’s Report <i>National Conference on Coastal Management at Coffs Harbour</i>
1989-1992	Legislative Council - <i>Standing Committee on State Development Coastal Planning Management in New South Wales: A Framework for the future</i>
1990	1 st NSW Coastal Policy released
1991	Commonwealth of Australia - <i>The Injured Coastline: Protection of the Coastal Environment. Report of the House of Representatives Standing Committee on Environment, Recreation and the Arts (HORSCERA)</i>
1992	United Nations Earth Summit in Rio – release of Agenda 21, chapter 17 on coastal management
1993	Resource Assessment Commission – National Coastal Zone Inquiry for Australia
1991-1993	OECD – Integrated Policies for Coastal Zone Management
1994	2 nd NSW Coastal Policy – released as a draft document
1995	National Coastal Policy for Australia
1996	National State of the Marine Environment Report (SOMER) for Australia
1997	NSW Coastal Policy released
1998	National Oceans Policy for Australia
2002	Planned review of the NSW Coastal Policy

Legislative Council Review

Ten years later, in 1989, the NSW Government initiated a Parliamentary review of coastal management in the State. The Legislative Council, in releasing the findings of the initial public survey (which included questionnaires, written submissions and oral evidence) into 'Public Concerns and Government Processes' for coastal development in NSW, stated that:

"It was aware of the growing concern throughout the community for the natural environmental generally; and also that there was disagreement about the "real issues" in coastal development and vast differences of opinion as to what might be done about them." As such, "it was important to know what the people of NSW perceive as the issues of the day, and not just what the experts and publicists say they are." (NSW Government 1989)

The study found that there was significant community concern for the following coastal issues:

- Environment
- Building
- Access
- Planning
- Development
- Wetlands
- Pollution
- Crown land
- Councils
- Greenhouse effect

1990 Coastal Policy

Interestingly, before the Legislative Council's study had been completed, the NSW Government, under Premier Greiner, released the State's first Coastal Policy in 1990. Its terms of reference were quite narrow, largely responding to the issue that was perceived as most critical at the time, namely pressure for large-scale tourist and residential developments (Sim in NSW Government 1991). The introduction of the 1990 NSW Government Coastal Policy was recognised by the NSW Legislative Committee as:

"The first real attempt by a State Government to view comprehensively the one kilometre strip as a "complex policy issue" rather than adhere to disjointed departmental approaches characterised by past governments" (NSW Government 1991).

Table 1.3 Principle Elements of the 1990 NSW Coastal Policy

- Increased public ownership of coastal land;
- Controlled development to minimise environmental degradation;
- Clustering major tourist developments around identified tourist growth centres;
- Protecting species and coastal ecosystems through existing policies; and
- The development of a coastal hazards policy to assist local government in dealing with natural coastal hazards and processes.

Source: NSW Government (1990a).

Responsibility for monitoring the implementation of the policy rested with the NSW Coastal Committee, which was initially established by the CPA (1979), but which was then re-established as a statutory body and given the responsibility of *‘overcoming the fragmentation of responsibility and ad hoc decision making that has hampered coastal management in the past.’* Specific management tasks were to be undertaken by the relevant Government agencies, but the Coastal Committee was to ensure that these tasks were co-ordinated.

For some time prior to the release of the 1990 Policy, because of growing pressure, there had concerted calls for a more co-ordinated approach to the management of the coastal zone and coastal zone resources (after Gilmour 1986, Cullen 1987, Gilmour 1988). The 1991 and 1992 Legislative Council Reports, which completed the Parliamentary Review into Coastal Planning and Management in NSW, identified a number of key issues (see Table 1.4 below), which restricted the ability of the State Government to manage coastal resources.

Table 1.4 Legislative Council: Key issues hindering Coastal Management in NSW

<ul style="list-style-type: none">• Firstly, local councils often competed with each other for growth and development;• Secondly, the sheer number of Local Government Authorities involved in the coastal development process meant that “keeping tabs” on issues and problems was difficult; and• Thirdly, when local councils did recognise and attempt to deal with problems the solutions were often of a short-term nature, as local government lacked the resources to implement longer-term solutions.

Source: NSW Government (1991).

By the process of a thorough examination of coastal planning and management, the 1992 Report detailed many of the shortcomings of previous responses (planning, policy and practice) by Government to manage the coastal zone. The Report stated that:

“Past coastal development regimes have been characterised by an apparent conflict between the ‘protection’ and ‘development’ arms of government. Historically, this conflict has often tended to be resolved in favour of development.”

Further to this, the Report detailed options for addressing many of the management options that were omitted in the 1990 NSW Coastal Policy. A series of recommendations to the Government for the improvement of the coastal planning and management system were made (see Table 1.5 below), included recommending the establishment of a central co-ordinating Agency for coastal management in the State.

Table 1.5 NSW Legislative Council: Recommendations for Improving Coastal Management in NSW

- Creation of a central Co-ordinating Agency;
- Creation of a comprehensive vision for the coast;
- Classification of coastal resources and natural assets according to conservation value;
- More effective co-ordination between government departments and agencies;
- Greater public involvement in decision-making; and
- Greater use of alternative dispute resolution processes.

Source: NSW Government Legislative Council (1991).

Calls for greater public involvement

The Report noted that there had been a groundswell of increased demands for public participation. This, it stated, could be attributed to growing environmental awareness in turn producing a strong public expectation of involvement in decision making, where decisions have environmental consequences (NSW Government 1991). It was recognised by both government and non-government agencies that growing pressure on the coastal zone and coastal zone resources required a more co-ordinated approach to the management of the area if environmentally sustainable development was to be achieved (after Sim in NSW Government 1991). The new Co-ordination Agency was to have key responsibilities for: public participation; alternative dispute resolution; the vision and classification criteria; and co-ordination between state organisations, all of which were seen to be an integral part of the solution to CZM problems in NSW (after NSW Government 1991).

The Government responded to the Legislative Council's report by concluding:

"... that while modifications to the present system may be required it is considered that the attainment of these goals is not dependent on creating new institutions and mechanisms. Additional layers of the process would ultimately lead to over regulation at the expense of effective management (NSW Legislative Council. NSW Parliamentary debates, 28 April 1992, p.2709-2712).

The release of the 1990 Coastal Policy was essentially a Government reaction to the major coastal management issues of the day. There was very little direction in terms of management and guidance for coastal managers and no attempt was made to describe and promote a vision for the coast or to co-ordinate CZM. A number of key issues that had been stressed in the NSW Legislative Council's Report (1991-92) were not reflected in the policy.

"For many, the 1990 Coastal Policy was seen as a compendium of state government programs which was not comprehensive; nor did the 1990 Coastal Policy go far enough – it was considered far too general" (NSW Government 1994).

1994 Draft Coastal Policy

In 1994, the NSW Government released a second Coastal Policy in draft format for public comment. The policy had expanded terms of reference to the 1990 version for coastal zone management, from development control for ports, harbours, sewage and wastewater to include broad-based environmental and social impact assessments (NSW Government 1994).

The 1994 Draft Coastal Policy framers recognised the need to develop a far more prescriptive policy platform than that espoused by the 1990 Policy - a policy that directed the management of the coast for current and future generations (NSW Government 1994). The Policy was in many respects the blueprint for the 1997 policy. It listed nine policy goals for the coast. These were divided into three broad categories:

- Conservation
- Socio-economic
- Implementation

A number of key public incidents such as the "pooh marches" and the development of deep ocean sewerage outfalls for Sydney in the early 1990s had served to focus public attention on coastal management issues (Cohen I 1999 pers. comm. 23 November). This was reflected by Government recognition that there had been changes in the community's expectations and perceptions of government at all levels and the role it should play in looking after the coast (Barham J 1999 pers. comm. 25 November). There was increasing community concern about the pace and location of development and the rate of population growth. Yet at the same time, the coast was becoming an increasingly popular place to live, work and recreate. The key message to come out of the public consultation phase of the 1994 Coastal Policy was the need to "*provide for effective involvement of communities in policy development, coastal planning and coastal management*" (NSW Government 1994). The Draft Policy, however, did not support the need for institutional change as recommended by the 1991 Report, instead highlighting the provisions provided Environment Planning and Assessment Act (1979). It is interesting to note that at a Federal level, the RAC recommended that the Commonwealth Government employ a process of institutional change in order to better set up management processes for CZM (RAC 1993). The release of the 1995 Coastal Policy, however, was not accompanied by any such changes.

1997 Coastal Policy

In 1997, the NSW Government released its latest Coastal Policy. The Policy responded to the fundamental challenge of providing for

"...population growth and economic development without putting the natural, cultural and heritage values of the coastal environment at risk." (NSW Government 1997)

A key facet of the Policy was the reformation of the NSW Coastal Council (Coastal Committee) – to be the independent "watchdog" for coastal management in NSW - to act as a source of professional advice to Government on coastal management issues (NSW Government 1997). The Policy has nine major goals:

Table 1.6 Vision and Goals of the NSW Coastal Policy 1997

Vision:

A coastal environment which is conserved and enhanced for its natural and cultural values while also providing for the economic, social and spiritual well-being of the community.

Goals:

1. Natural Environment Protected Rehabilitated and Improved
2. Coastal Processes and Hazards Recognised and Accommodated
3. Aesthetic Qualities Protected and Enhanced
4. Cultural Heritage Protected and Enhanced
5. Ecologically Sustainable Development and Use of Resources
6. Ecologically Sustainable Human Settlement
7. Appropriate Public Access and Use
8. Information to enable effective management
9. Integrated Planning and Management (NSW Coastal Policy 1997)

Source: NSW Government (1997)

1.7 NSW Coastal Policy in the National Context

The history and development of coastal management in NSW and in Australia is indelibly linked to broader issues of resource management nationally and internationally. The delivery of coastal management objectives in NSW is a complex task involving input from all three spheres of government, as well as non-government organisations. Australia Government's have produced coastal policy at all three levels of government (see Table 1.7).

Table 1.7 Coastal Policy Levels in Australia

Local Government	National Local Government Coastal Management Policy (1999)
State Government	NSW Coastal Policy (1997) – due for revision in mid-2002. Queensland Coastal Management Policy (2001) Tasmanian Coastal Policy (1996) Victoria Coastal Strategy (1997) Draft Western Australian Coastal Policy (2001)
Federal Government	Federal Coastal Policy (1995) – due to be revised during the Government’s current term of office.

1.8 Key Issues for Coastal Zone Management (and related to NSW)

As discussed at the start of section 1.3 Coastal Zone Management, the set of coastal management issues common to NSW, affect other regions in Australia and are similar to issues faced in many other places around the world.

Despite national, subregional, regional and global efforts, current approaches to the management of marine and coastal resources have not always proved capable of achieving sustainable development, and coastal resources and the coastal environment are being rapidly degraded and eroded in many parts of the world. (AGENDA 21 1992).

The paradigm policy setting for CZM today is the need to balance population growth and economic development alongside the protection and enhancement of the natural environment. Lord (2001) argues that “since the implementation of the NSW Coastal Policy in 1997 the emphasis of the program and the ensuing management strategies have changed to better reflect the principles of ESD.” Both in Australia and around the world, there have been multiple attempts to deliver CZM at local, national and international levels through the development of various planning, policies and programs. The coastal zone is an area of high ecological value and of high demand, and its effective management, as described in the NSW Coastal Policy is critical to the long-term future of the State - for the environment and for the community.

The Coastal Policy identifies key focus areas for CZM in NSW. These resource outcome and socio-economic issues can be summarised as:

- Population Growth;
- Access to the Coast;
- Access to Resources;
- Community; and
- Sustainability.

The complex interplay between the natural, cultural and built environments requires that these issues be dealt with through the development of integrated policies and programs. Generally, coastal zone management programs have been initiated through a combination of legislative endorsements such as the Coastal Zone Management Act (1972) in the US and the Coastal Protection Act (1979) in NSW, and government policies and programs such as the Victorian Coastal Strategy (1997) and the NSW Coastal Policy (1997).

A critical theme to emerge from the plethora of policy, programs and reviews conducted on the coastal zone up until the mid-90's was a recognition that the Australian coastline was not inexhaustible as a resource and that coastal management was a responsibility to be shared amongst all levels of government (after HORSCERA 1991). Existing management arrangements, however, were considered to be fragmented and poorly co-ordinated and this was seen to be a significant contribution to a lack of effective and integrated coastal management.

Funding and Compatibility of CZM Programs

Unlike the USA, the Australian National Coastal Policy is not binding on the State Governments and there is no requirement for consistency at the lower levels of government. Kay and Lester (1997) argue that the practice of coastal management should increasingly be left to local government, the arm of government that is closest to 'coal face', however, the differential ability of the three spheres of government to fund coastal programs under the current high level of vertical fiscal imbalance is likely to continue to hinder the delivery of coastal programs by state and local governments due to a lack of funds and there is no indication that the institutional arrangements and philosophy for delivering coastal management is likely to change in the near future. This situation is in direct contrast with that in the USA where under Section 307 of the US Coastal Zone Management Act (1972) the Federal Government provides direct funding for coastal management programs to those States willing to establish "to the maximum extent practicable" the goals of the Federal Act (after Brower *et al* 1991). While funding for State and Local Government programs is available through the Natural Heritage Trust Program, there is no subsequent requirement for compatibility between programs.

The reality of the situation for Australia is that the broad statements contained in the National Coastal Policy (DEST 1995) makes it fairly easy for any State-based program to be compatible with the National Policy. It is not the incompatibility of the State and National coastal policies that prevent Australia from adopting a program similar to that described above. Rather, it is that an antecedent policy and legislative framework does not provide for this type of arrangement and the current institutional climate discourages it. A review of the current policy has been earmarked for sometime in the next three years by the current Federal Government. A revised or new national coastal policy, by adopting some or all of the recommendations from past inquiries and reports for CZM (see Table 8 below) may help to deliver serious policy direction for CZM and also encourage the development of better Local-State-Federal relations.

1.9 Management of the Coastal Zone – the need for reform.

Perhaps the key issue in Australia is that the coast and its management are so intertwined with the Australian “psyche” that the job of improving coastal management effectively is one of improving government and governance itself (after Kay and Lester 1997).

Dovers and Mobbs (1997) argue that current policy setting within natural resource management places new demands on policy makers and managers. Central to this is the role that Government should play. There are confusions and duplications between levels of government and between agencies (Thom 1998 and Goss, in Kay and Lester 1997). As well as this, there has been a reluctance to date, or an inability by ‘coastal managers’ to become ‘integrated coastal zone managers’ (Kay and Lester 1997). The 1997 NSW Coastal Policy recognised many of these shortfalls and made an attempt to redress them by introducing specific management and training objectives that are outlined in Goals 8 and 9 (see Chapter 2) of the Policy.

Much of the evidence presented in many of the reports and inquiries into coastal zone management has been summarised by the findings from the RAC Inquiry which identified that most previous reports into coastal management had concentrated on physical and environmental issues at the expense of social and cultural issues. In general, the reports identify a litany of problems arising from poorly managed development and use of coastal zone resources but they largely fail to provide a realistic and detailed framework within which management reform can take place (RAC 1993c).

In NSW, the experience has been remarkably similar to that experienced at the Federal level. There is significant understanding of what has to be managed in the coastal zone – sea level rise, development, erosion, coastal hazards, population growth – but there has not been a similar commitment to actually manage the coastal zone and this is hindering effective and integrated

CZM. In other words, too much attention has been paid to why (resource outcome) the coast is managed and not enough to how (organisational process) it is or should be managed. Thom argues that for CZM reform to occur, four changes need to be made:

1. ESD principles need to be embraced;
2. ICZM principles need to be adopted;
3. Global changes need to be recognised and planned for; and
4. There needs to be greater community based management and participation (Thom 2001).

It is interesting to compare the development of CZM policies both in NSW and Federally. For example, a number of the recommendations from the NSW Legislative Council's 1991-2 Report were not embraced by the State Government when the 1994 Coastal Policy was formulated and similarly, key recommendations from the RAC Inquiry were not converted into policy when the Federal Government released the National Coastal Policy in 1995. There is a clear indication that the terms of reference for coastal policies have been far beyond the scale and scope of policy direction for many years. Table 8: below provides an indication of some of the key management issues for the coastal zone.

The lack of guidance and the inability to draw together the disparate information needs of State and Local Government coastal managers, which could have happened through the auspices of the Australian Coastal Management Council at a Federal level, as recommended by the HORSCEC (1980) Report and a number of subsequent reports (National Coastal Conference 1986, HORSCERA 1991), is evidenced then by a very slow broadening of the terms of reference for coastal planning and management from a hard engineering and scientific based regime. This is despite strong evidence supporting the need to include issues such as training needs for coastal managers to better deal with the day to day issues as well as strategic planning, especially at the local government level and the need for greater public involvement in policy and program development and review (after Cullen and Sorensen 1977, Gilmour *et al* 1978).

In many cases, key recommendations were not taken up by the respective governments because of a desire not to introduce institutional change. For example, then Prime Minister Fraser responded to the HORSCEC recommendation for the establishment of a national coastal policy, by replying that it was the State Governments rather than the Federal Government that had primary carriage for coastal matters (HORSCEC 1980). A similar situation at the State Government level has already been highlighted earlier on in this chapter.

The reluctance to remove the sectoralised nature of government and to impose these changes has resulted in a deterioration of the quality of many resources in the coastal zone (Stark 1986, Kay and Lester 1997).

“The silo-isation of agencies makes it very difficult to get decisions that cut across the interests of the various groups” (Thom 2001)

The major findings of the State of the Marine Environment Report (SOMER) for Australia (1995) pointed out that there has been a significant deterioration in many of Australia's productive marine areas such as mangroves and seagrasses. Pollution from land-based sources as well as dredging and trawling has contributed to this environmental damage. The Report suggested that a combination of factors was necessary if these issues were to be redressed in any legitimate manner. Integrated management, especially through 'Total Catchment Management (TCM)' at the regional level was recommended. SOMER was just one of a series of major reports and inquiries that urged for a major overhaul of coastal management in Australia. Table 1.8 (below) provides a summary of the key management recommendations for CZM.

Table 1.8 National and International Coastal Zone Management Recommendations

Report	Key Management Recommendations (Organisational Processes) from National and International Reports/Inquiries			
	National Coastal Management Act	Effective Public Participation	Clear identification of Agency Responsibilities at National, State and Local Government level and better Co-ordination.	Improved training and understanding for Coastal Managers
Stratton Report	X	X	X	X
HORSCEC	X		X	X
1986 National Conference	X	X	X	X
HORSCERA	X	X	X	X
OECD 1990	X	X	X	X
Agenda 21		X	X	X
RAC 1993	X	X	X	X
1995 National Coastal Policy		X	X	X
SOMER			X	X

Perhaps the most conclusive statement regarding institutional failure for CZM reform has come from RJ Graham, Special Commissioner to the RAC Inquiry (1993) who wrote, in a dissenting report, that the recommendations and proposals contained in the Report did not go far enough. Graham argued that:

“The Inquiry’s recommendations focus on the ‘big picture’ – a necessary focus, but insufficient on its own. They largely fail to make the connections with the litany of management problems... These problems are not resource management problems to be solved by National Plans and broad strategies alone. Broad prescriptions need to be connected directly to what happens on an everyday basis on the ground. To do so it has to be stressed that it is not resources which need to be managed. What is needed is management of the ways in which people use and

develop resources. This may be an obvious point but it seems to have been missed by the Inquiry."

The argument presented by Graham was that while management policies were loaded with good broad statements of policy and well-documented strategies, they gave little guidance to managers on the ground. The case for more integrated approach to coastal zone management as well as for greater sharing of information has been argued for over twenty years in Australia (Cullen and Sorensen 1977, Gilmour *et al* 1978).

Dovers and Mobbs (1997) argue that the current policy framework is incapable of dealing with natural resource management issues because they are different in kind to other policy issues. For example, the National Coastal Policy (DEST 1995) has no application at a State or Local Government level and is therefore unable to deliver any real sense of national coastal management direction for Australia. Under the Liberal/National Coalition, the National Oceans Policy (1998) has suffered a similar fate, although the results are not yet cut and dried. Oceans Policy goes one step further than the Coastal Policy because it instituted a series of Memorandum of Understanding (MoU's) with the States to ensure compliance with the national policy. Unfortunately, the State Governments were not involved in the development of the MoU's and to date, none have been signed up to the MoU's.

Using Englander *et al's* (1977) breakdown of key coastal management issues into 'resource outcome' and 'organisational process' categories, Table 1.9 below, presents a useful review of key coastal management issues affecting Australia as identified by leading researchers and institutions, reports and inquiries.

Table 1.9 Key Coastal Management Issues

Organisational Process Issues	Resource Outcome Issues
<p>Management</p> <ul style="list-style-type: none"> • The tendency of each profession or occupation to form a closed management system (Brown 1996) • Lack of a national (and in some case State) approach to management • An inadequacy of the national information system to provide services suitable for coastal managers (HORSCEC 1980, Brown 1996) • Administrative issues (Kay and Alder 1999) • Innovative management (Gilmour 1986) • The federalist problem: Are state coastal programs expected to achieve national goals, state goals, or both? (Knecht <i>et al</i> 1996) • Capacity building, including professional development of coastal managers, co-ordination of coastal research, improvement of access to coastal data, mitigation of risks, and improvement of policy and strategic management (HORSCERA 1991, RAC 1993, ICWG 1994, in Kay and Lester 1997) • Aboriginal and Torres Strait Islander issues, dealing with best practice models for management of coastal Aboriginal land (ICWG 1994, in Kay and Lester 1997) • The “attribution” problem: A state coastal program is not the only program seeking to protect and enhance the coast and its resources. Consequently, an outside observer would face difficulty in knowing which program to credit with success or failure. In addition, factors external to any management program, such as overall social and economic trends, can also affect what occurs at the coast (Knecht <i>et al</i> 1996) • Improve recognition of indigenous peoples’ interests in management of the zone (RAC 1993) • Access • Public expectations of a ‘right’ of access to the coast (Kay and Lester 1997) • Access (Stratton Report 1969) • Equity • Equity (Channell 1996a) • Values • Failure to implement the real procedures to ensure that decisions about the use of resources take account of the real value of resources to society as a whole (RAC 1993c) • Monitoring and Evaluation 	<p>Environment</p> <ul style="list-style-type: none"> • That degraded environmental values be restored and enhanced (Thom 2000) • That ecosystems necessary for the survival of a variety of life forms are not threatened (Thom 1999) • Increased coastal use and its cumulative impacts (Kay and Lester 1997) • The impacts of coastal use and impacts on coastal uses (Kay and Alder 1999) • Sustainability (OECD 1991a) • Coastal use (Kay and Alder 1999) • Emerging issues such as introduced species, ballast water discharges, climate change and associated greenhouse issues (Kay and Lester 1997) • That catchment issues such as water quality and salinity must not affect the coast (SOMER 1996) • To reduce pollution of estuarine and coastal waters (Underwood and Chapman 1995; WWF 1999; WWF 2000) • To reduce pollution of coastal waters by discharge, seeking innovative solutions to effluent and stormwater management problems (ICWG 1994, in Kay and Lester 1997) • To improve management of fisheries through more effective management of sea-based resources of the zone (RAC 1993) • That the environment should not be damaged by Acid Sulfate Soils (Sammut 2000) • That a percentage of coastline retained as national parks (NSW Coastal Policy 1997) • That climate change and sea level rise be considered (May <i>et al</i> 1998) • That natural processes and hazards be given a high priority (NSW Coastal Policy 1997) • That degradation caused by urban sprawl and activities in urban and remote locations in the coastal zone be reduced (RAC 1993) • That water quality be improved (NSW Coastal Policy 1997) • That biodiversity be conserved (NSW Coastal Policy 1997) • Population Growth

Organisational Process Issues	Resource Outcome Issues
<ul style="list-style-type: none"> • The “process versus substance” problem: Should state coastal programs be evaluated in terms of process-related goals or in terms of substantive (on the ground) outcomes of specific problems found in each state? (Knecht <i>et al</i> 1996) • Lack of outcome related information and data, + state programs often lack clearly articulated goals, thus compounding evaluation problems (Knecht <i>et al</i> 1996) • Education / Awareness / Community Involvement • Continued growth of environmental awareness and a focus on sustainability (Kay and Lester 1997) • The need to assist the community to acquire the necessary skills and knowledge to participate in the decision-making process (RAC 1993, Legge-Wilkinson 1996) • Inadequate public involvement (RAC 1993c) • Coastcare, a community-based coastal program to increase community involvement in coastal management to be established (ICWG 1994, in Kay and Lester 1997) • Public involvement in the decision-making process (Gilmour 1986) • The need to encourage and support direct community involvement in the decision-making process (Legge-Wilkinson 1996) • Education and training should be focused on coastal zone resource managers (RAC 1993) • Improve recognition by the community of the value of the resources of the coastal zone (RAC 1993) • Management • Be wary of relying too much on management programs alone to deliver positive environmental outcomes (after Ludwig <i>et al</i> 1993, Dovers and Mobbs 1997) 	<ul style="list-style-type: none"> • That population growth be monitored for its effect on environmental quality (NSW Coastal Policy 1997) • Values • That cultural heritage items and landscapes be managed and conserved (NSW Coastal Policy 1997) • That the coastal zone remain a desirable place to live (Thom 1999) • That the rights and needs of indigenous people be recognised (NSW Coastal Policy 1997) • Heritage • That important coastal heritage sites shall be retained (SOMER 1995, Evans 1996, McGregor 2000) • That development complement the surrounding environment (NSW Coastal Policy 1997) • That areas of high aesthetic quality be protected (NSW Coastal Policy 1997)

1.10 The role of the community / public

Community based management and participation in CZM

Greater community-based management, public participation and consultation has been identified as one of the four key triggers for reform in CZM (Thom 2001, Thom and Harvey 2001) both in Australia and internationally. The emergence of the community as a powerful factor in coastal zone management has been well documented in the United States. The Golden Shores (Healy 1978) describes the growth of coastal community environmental activism in California in the late 1960s and the lead-up to the passage of Proposition 20 - the Coastal Conservation Initiative, a coastal protection program launched on a temporary basis by a citizen's initiative that California voters approved in November 1972. The Coastal Conservation Initiative preceded the US CZMA (1972) and laid the groundwork for the establishment of the California Coastal Commission in 1972 and, was made permanent by the promulgation of the California Coastal Act in 1976 (after California Coastal Commission 2001).

In Australia, environmental activism began to emerge in the mid 1960s, with the establishment of environmental groups, such as the Australian Conservation Foundation in 1965. Environmental groups became directly involved in direct political confrontations over issues such as sand mining and logging (Luckie 1995). The emergence of environmental legislation during this period was also a reflection of the increasingly widespread public awareness and concern for the environment.

Over the past 20 years, there has been continuous encouragement (see Tables 1.8 & 1.9 above) for the inclusion of greater public and community involvement in decision-making for CZM (see also Caldwell 1985, Gilmour 1986, Born and Miller 1988, Gilmour 1988, Jacob 1994). As described in the previous sections, Governments at all levels have been reluctant to embrace this as part of the institutional reforms so necessary to CZM. Part of this may be that because whole of government reform is required it has placed in the 'too hard basket' in terms of being a favourable political strategy. Interestingly, although one of the key issues identified in the Reports into CZM was for greater public participation as a key driver for improvement, there was, however very little prescriptive information about how this might occur. The link between policy and practice was not made clear. It is my intention to close this information gap with the development of a model and a set of criteria for public participation that will be presented in Chapter 5.

Reports and inquiries into coastal management have been *unanimous* in their support for greater public involvement in CZM programs. Ultimately, "*resources need little management if there is no interference from human activity*" (RAC 1993). The National Coastal Conference (1986) recommended that:

- Federal, state, and local governments and other relevant organisations provide encouragement and financial support for community based coastal management activities;
- Public participation be accepted as an integral component in the development of coastal management strategies;
- Local communities be involved to the maximum possible extent in policy formulation and the development of coastal zone management programs; and
- Wherever possible, the widest range of public views must be taken into account in formulating coastal management procedures.

The involvement of the public in decision-making is closely linked to the identification of Agency responsibilities for CZM and co-ordination between agencies and all levels of government. Table 1.8 (above) identifies that effective public participation cannot occur in a vacuum. It must be associated with improved training and understanding for coastal managers and the identification of responsibilities outlined above.

Public participation in the decision-making process has on the one hand been offered as a method for legitimising state based coastal management programs and also as a means to provide for better solutions (Sarkissian 1986, Coenen 1992, Luckie 1995). The role and influence of community groups in CZM has grown considerably over the last twenty years at local and state levels and is expected to continue to grow over time (Thom 2001). Many community groups are gradually getting their messages through to decision-makers.

Public Participation in CZM in NSW

Public consultation did not serve as a major theme of the 1990 NSW Coastal Policy. In terms of public participation or community consultation, there was no specific mention – it was couched in terms of being part of the assessment process. Rather it was discussed briefly within the parameters of the existing planning and development system, which was only a year later declared to be inadequate at both State and National levels (HORCERA 1991, NSW Government 1991). The Legislative Council Report (NSW Government 1991) found that *“people want the opportunity to participate even if they utilise that opportunity only on rare occasions.”* A key issue that has often led to conflict was from 'limited and restricted ownership' of decisions that affect a population larger than the actual decision-makers.

The groundswell for increased demands for public participation *“has been attributed to (among other things) over-centralisation of government, the indifference and unresponsiveness of public authorities and perceptions of the state as an arm of business interests* (NSW Government Legislative Council 1991). Non-government organisations such as environment and community groups are relied upon by the general public far more than the government and government

agencies for the delivery of accurate and believable information about the environment (EPA1994). The Government recognises that community groups have an important role to play in environmental decision-making, both in policy development such as policies and program review such as environmental reporting though it is ineffective in achieving this.

It is important to know how much the community knows about specific environmental problems, whether (and how) they are prepared to modify their behaviour, and in what areas they think we should be concentrating our energies (Hartcher, in EPA 1994).

Today, it is generally accepted that coastal resources can only be effectively evaluated and managed in the total context of the social and cultural environment (Stratton Report 1969, Ehler in Kay & Alder 1999).

In a recent summary of the State Coastal Management Program, Lord (2001) stated that:

“...the involvement of the community is vital to the delivery of coastal management both through direct participation in the committees and broader review of the overall draft strategies.... It is only through the strong and continued partnership approach that the problems facing coastal managers and local communities can be correctly identified, analysed and redressed.”

It is interesting to note, however, that to a large extent, community participation in coastal management in NSW is achieved through the Coastcare program. Coastcare is a joint State and Federal Government program that commenced in 1995. It encourages community involvement in the protection, management and rehabilitation of our coastal and marine environments. While the Coastcare program is invaluable, its purpose is not to monitor and evaluate community or public involvement in policy and program development for coastal management in NSW. Nevertheless, it is commonly referred to as the vehicle by which community involvement in all aspects of coastal management is measured (D. Lord pers. comm. November 15, 2001).

In fact, 78% of Coastcare funding is directed towards on ground works, whereas education (9%), planning (8%) and monitoring programs (3%) have received a total of 20% of available funding (Lord 2001). The discrepancies between what Coastcare has been claimed to be doing and what Coastcare actually does falls under the same helm of criticism that befell the National Landcare Program when it came under review in 1996-97 (ANAO 1997). There was very little evidence to demonstrate medium or long-term integrated and strategic planning specific to monitoring and evaluating the role of the community in decision-making. It is in this climate, where current government policy is to say more and do less, that the benefits of an informed, aware and active public are crucial to the reform of CZM (after Ewing 1999).

1.11 Conclusion

The coastal environment in NSW is unique in character. People have been attracted to the coast for thousands of years because of the milder climate and the relative abundance of food and potable water. Since European settlement, the rate of population growth and resource consumption has escalated dramatically and this has led to a point where the natural environment is being polluted, and access to available resources is diminishing.

Worldwide, there has been a strong intellectual debate about the practice of CZM. This is reflected in Australia by the multitude of policies, reports and inquiries that have been produced over the past 30 years. I have provided detailed descriptions of the major reports and their recommendations for NSW. Despite the attention that CZM has received in Australia, it is my contention that there are major 'resource outcome' and 'organisational process' issues that prevent effective management.

Numerous reports and inquiries into CZM have called for urgent changes to the way coastal resources are managed because the pressure on coastal environments in NSW has in many cases reached a point of no return (see Underwood and Chapman 1995) - where the ability of the natural environment to replenish itself has been overtaken by the rate of destruction.

One of the key issues for reform and improved CZM is the need for greater and more effective public participation and community involvement in the decision-making process. This has been a major recommendation from milestone reports such as HORSCERA, Agenda 21 and the RAC, yet despite this, public participation has not been successfully adopted by governments as a means of improving the practice of CZM. It is a sad reality that:

"good policy has often sat on shelves across Australia and gathered dust, and the formulation of good policy has often proved a less demanding task than its implementation" (Morvell 1996).

The role that government plays in setting operating paradigms is critical to the establishment of a vision for the coast and the development of long-term goals and objectives. Ultimately, this will affect the allocation of resources for CZM. Dovers (2001) argues that policy implementation, however, has been too often a stop-start affair, characterised by *ad hocery* and amnesia. As this Chapter has demonstrated, there have been a number of cases where the governments of the day have deliberately chosen not to adopt the findings of CZM reports because of more expedient political considerations.

This chapter has demonstrated that significant reform of the CZM system is required. A major component of this reform is the need to include community-based management and participation in decision-making for coastal policy, program review and development. Importantly, there needs to be a system that enables the collection of such data. An informed public that is actively included in the decision-making process is necessary if coastal managers are to be able to achieve the balance sought in the NSW Coastal Policy. This will require significant improvements in both the vision and practice of public participation strategies in coastal zone management. The Coastal Policy has made a commitment to this and over time, the level of public participation has improved significantly, however, there is much to be done before policy and practice match the political rhetoric being practiced by many decision-makers.

Chapter 2:

Current Policy, Legislative and Reporting Framework for Coastal Management in NSW – a Review

2.1 Introduction

Over the last two decades there has been a global proliferation of interest and development of plans for integrated coastal zone management. In all regions of the world, there are nations and semi-sovereign states, which have initiated or are currently developing coastal management programs (after Sorensen 1993). The range and depth of issues related to managing the coastal zone require that an holistic perspective be taken to the management of this precious resource. It is no longer sufficient to manage the coastal zone from a local perspective.

Environmental problems cannot be simply and reliably solved at the same level of government where they originate. Local government has to deal with global problems and international agreements can address very local problems (Coenen et al 1998).

In NSW, decision-makers need to take into account international issues such as climate change and sea level rise, national issues such as population growth and migration to the coastal zone and local issues such as erosion and the disturbance of acid sulfate soils.

This chapter provides a review of the environmental planning and legislative systems for CZM in NSW. After an introduction to environmental law and the constitutional relationship between the Federal, State and Local governments, the Chapter will focus on a review of community participation and opportunities for participation in CZM. Coastal planning and management in NSW is part of resource planning for the State. As such, many of the statutory land use provisions and regulations that govern the rest of the State are applicable to the coastal zone. There is of course some legislation that is specific to CZM. Three avenues for public participation in CZM will be examined. They are: the NSW Coastal Policy, State of the Environment Reports (SoERs) and the key piece of environmental and planning legislation, the Environmental Planning and Assessment Act (EP&A Act) (1979) and the relevant opportunities that these avenues provide for public participation and community involvement in policy and program development and review for CZM in NSW.

2.2 Environmental Law

Environmental law is a relatively recent phenomenon. It has grown over the last 30 years as a result of changes to the environment, in particular, pressures brought about by a rapidly increasing population and technological advances (EDO 2000b). It is concerned with resolving disputes about the use of physical resources, whether natural or human-made (Farrier *et al* 1999).

Environmental law is a public concept. It represents a shift in the law from protecting private individual's rights to protecting the wider public interest. This is achieved through the application of the laws, regulations, and legal processes. The recognition of the importance of protecting the natural environment through the law and the legal framework has been recognised from community and local government level through to international courts and procedures.

Most environmental law is concerned with setting up procedures to be followed by decision-makers. In delegating the power to decide whether or not to permit certain activities, lawmakers usually require decision-makers to take particular factors into account before reaching their decisions (Farrier *et al* 1999). In Australia, environmental laws can be made in two ways:

- By Government – Local State and Federal Governments can make laws. Laws include Acts, Regulations, By-Laws and Regulatory Instruments. Acts are made by Parliament and it may authorise the making of other types of laws by Ministers or other authorities such as local councils. All three levels of government have a role in planning and decision-making for coastal management, however, most environmental laws are made by State Governments.
- By Courts – Common Law is based on the court's interpretation of earlier decisions of other judges in similar cases. Court rulings set precedents for future courts at lower levels to follow (EDO 1999, EDO 2000b).

Indigenous Law

There is of course another component of environmental law, much older than the Westminster system of law making that governs Australia today. It is of course "Indigenous law (or lore)", a combination of laws, stories and mythology that has been part of the Aboriginal way of life in Australia for many thousands of years. This system of law is generally not codified within the legal or planning system and as such has had a relatively minor role in CZM. There has, however been a growing recognition of the need to include indigenous law, including rights, in coastal planning and management. The HORSCERA Report (1991) was the first Federal Inquiry to recognise that indigenous law/lore had a role to play in CZM.

2.3 Federal Government

The Federal Constitution determines how powers are divided between the Commonwealth and State Governments in Australia. The Commonwealth government has legislative power only in relation to those matters specified in the Constitution while the remainder of power rests with the States. Although the Constitution does not specifically refer to environmental matters, the Commonwealth has used its Constitutional powers in other areas to regulate matters relating to the environment. According to Farrier *et al* (1999) the formal position under the Constitution is that the Commonwealth Parliament has no direct power to legislate on environmental matters in the State of New South Wales. The Constitution determines how powers are divided between the Commonwealth and State Governments in Australia. The Constitution confers legislative power on the Commonwealth parliament primarily through Section 51 that lists 39 heads of power held concurrently with the States. The exclusive powers of the Commonwealth are few. Where both Commonwealth and State Governments legislate in fields of concurrent power, if the laws are inconsistent, then the Commonwealth law overrides the State law.

Table 2.1 Key National Legislation affecting the Coastal Zone

Year	Acts
1981	Environment Protection (Sea Dumping) Act
1991	Fisheries Management Act
1999	Environment Protection and Biodiversity Conservation Act
	Policies/ Strategies
1992	National Strategy for Ecologically Sustainable Development
1995	National Coastal Policy
1998	National Oceans Policy

The scope of Commonwealth environmental powers, however, has changed significantly in recent years with the introduction of the Environment Protection and Biodiversity Conservation Act (EPBC Act 1999). The introduction of this Act represents the most significant change to Commonwealth environmental laws since they were first introduced in the 1970's (EDO 1999, EDO 2000). Ogle and Blazejowska (EDO 2000) write that:

Whilst it is not yet clear how extensive the impact of the Act will be, we can expect to see a completely new role for the Commonwealth in the areas of environmental management which it has chosen to regulate. The legislation is far reaching, and affects the way in which developers, local councils, state governments and state government agencies carry out their operations.

Table 2.2 Environment Conservation and Biodiversity Conservation Act (1999)

The Act covers the following four areas:

1. *Environmental Impact Assessment* and approval of:
 - a. Activities by the Commonwealth or on Commonwealth land; and
 - b. Listed matters which are of national environmental significance.
2. *Biodiversity protection*
3. *Protected areas*
4. *Administration and enforcement of the Act*

The Act binds the Crown in all its capabilities (s 4) (EDO 2000a).

The Act applies to an action that has, will have, or is likely to have a significant impact on a matter of national environmental significance. The matters of national environmental significance are:

- World heritage properties;
- Ramsar wetlands of international importance;
- Nationally threatened species and communities,
- Migratory species protected under international agreements;
- Nuclear actions;
- the Commonwealth marine environment (generally outside 3 nautical miles from the coast); and
- any additional matter specified by regulation (after consultation with the States).

Source: EPBCA 1999

2.4 State & Local Government

Public participation and community involvement in CZM decision-making in NSW can take place in a number of ways within the current legislative and policy framework:

- Decision-making procedures about environmental issues;
- Monitoring for compliance with environmental law; and
- Enforcement through the Land & Environment Court (after EDO 1999).

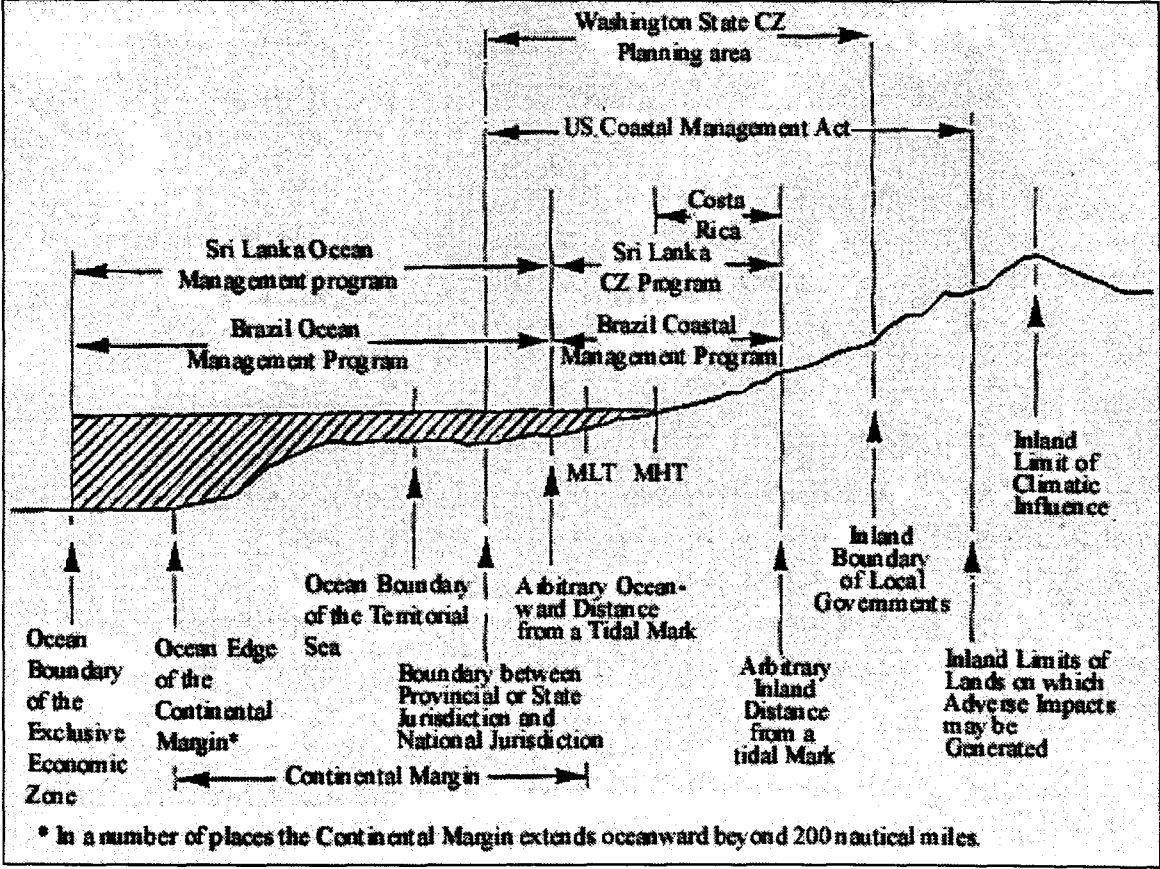
At its most basic level, participation can take place when: policies, plans or programs are developed and when they are reviewed; or when particular strategies are implemented. In other words, participation can take place at the start or towards the end of the planning process. This section of the Chapter will be divided into a number of sections. Firstly, it will discuss the role of the community at the start of the decision-making process, for example in the development of policies and plans, and secondly, it will discuss the role of the community towards the end of planning process, for example in the review of policies and plans or particular planning instruments.

Most environmental powers lie with the State Government. In NSW, Parliament passes laws to regulate conduct which is likely to affect the environment. The “*environment* includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings” (EP&A Act 1979 S.4.1). In this context, the term ‘environment’ has a broad

definition and can refer to natural, built, social and work environments. State Governments also largely determine the extent of Local Government environmental regulation – eg. through the *Local Government Act 1993 (NSW)*.

The NSW Government has responsibility for crown land in the coastal zone, including reserves and national parks, and over the three nautical mile territorial seas. The State Government has jurisdiction over the terrestrial component of the coastal zone, and over the three nautical mile territorial seas. Figure 2 (below) describes many of the different definitions of the coastal zone that are employed by various governments and agencies for the purposes of CZM.

Figure 2.1 Boundaries of the Coastal Zone - Biophysical and Jurisdictional



Source: Clark 1996

In NSW, there is a diverse set of legislative responsibilities in managing and monitoring the territorial seas and, as a result, there is a plethora of agencies with management responsibilities. The Government has diverse legislative responsibilities in managing and monitoring the coastal zone and, as a result, responsibility is divided amongst the various Government Agencies. Table 2.3 (below) details the major pieces of policy and legislation that affect coastal management in NSW as well as the government agencies with responsibilities for management of the coastal zone. The interaction between these agencies has often been described as giant steel rods linked by strands of gossamer (Thom 1998).

The Role of Local Government

Local Government plays a key role in CZM in NSW. Local Government has been identified, through agreements such as Agenda 21, conservation strategies, coastal zone inquiries and other sources as local coastal managers that can integrate national and state policies with local needs (RAC 1993, OECD 1993 in Channell 1996a). As local government tends to carry out many management decisions and the majority of land development and environmental planning issues take place at this level, it is often considered to be the agency most accountable to local communities and may need to justify decisions on the basis of community interest and welfare (after Luckie 1995). Dovers (2001) believes that local government has untapped potential, especially when municipalities work together through various mechanisms. Until recently, however, Thom and Harvey (2001) argue that many local councils have had a very limited perspective to coastal management. For example, Murrell (1996), after 20 years as a local councillor, commented that there:

"was little strategic thinking, confusion occurred in terms of responsibilities and therefore community participation and planning was also very fragmented, and there was no attempt at achieving catchment co-ordination or integrated coastal management."

2.5 Coastal Policy and Legislation

In 1997, the NSW Government released its latest Coastal Policy. The Policy is Government policy and all New South Wales State Government agencies and local councils are obliged to take account of it in the preparation of their own specific policies and programs (NSW Coastal Policy 1997). Where the Policy applies, the consent authority (usually a local council) must take the NSW Coastal Policy into consideration in deciding whether to grant consent to a development application. It is important to understand that a consent authority is not bound to follow the Coastal Policy; it is simply required to take it into account (EDO 1999).

The policy, however, does not apply to land within the Greater Metropolitan Region of Sydney-Newcastle-Wollongong or the Central Coast. Concurrent to the development of the NSW Coastal Policy, the Sydney Coastal Councils Group developed the Sydney Regional Coastal Management Strategy (SRCMS), which was released in 1998. All the local Councils in the Sydney metropolitan region (16) are signatories to the Strategy. The Strategy is set up in a broadly similar manner to the Coastal Policy, with a vision, a series of objectives and a strategic actions program against which member councils must report back (see Table 2.3 above). The SRCMS encourages effective public consultation and participation in the planning process before decisions are made. There is particular emphasis on:

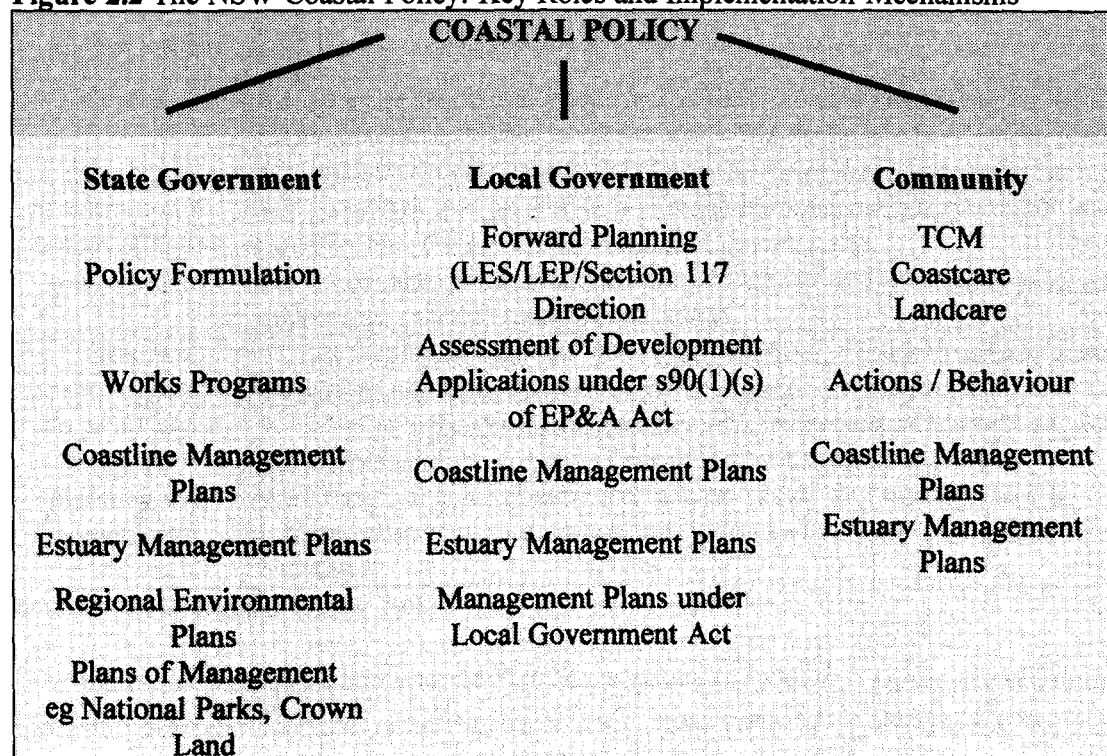
- Local communities sharing direct responsibility for management of local coastal areas; and
- The recognition and consideration in resource use decision-making of Indigenous peoples links to the land (SRCMS 1998).

Table 2.3 Summary of Coastal Management in New South Wales

Current Status	<p>NSW Coastal Policy released in 1997. Coastal Council reconstituted under Coastal Protection Amendment Act, 1998. The Policy has nine major goals:</p> <ol style="list-style-type: none"> 1. Protecting, rehabilitating and improving the zone's natural environment; 2. Recognising and accommodating it's natural processes; 3. Protecting and enhancing it's aesthetic qualities; 4. Protecting and conserving it's cultural heritage; 5. Providing for ecologically sustainable development and use of resources; 6. Providing for ecologically sustainable human settlement; 7. Providing for appropriate public access and use; 8. Providing information to enable effective management 9. Providing for the zone's integrated planning and management.
Main Instruments and Acts	<ul style="list-style-type: none"> • Coastal Protection Act 1979 • Coastal Protection Amendment Act 1998 which redefined the coastal zone, reconstituted the Coastal Council and applied the principles of ecologically sustainable development to Coastal Policy. • Environmental Planning and Assessment Act 1979 • Local Government Act 1993 • Local Government Act Amendment Act 1997 • Crown lands Act 1989 • Catchment Management Act 1989 • Threatened Species Conservation Act 1995 • National Parks and Wildlife Act 1974 • Native Vegetation Conservation Act 1997 • Fisheries Management Act 1994 • Marine Pollution Act 1987 • Coastal Policy 1997 • Water Act 2000 • State Environmental Planning Policies (SEPPS) <ul style="list-style-type: none"> • SEPP 14 Coastal Wetlands • SEPP 26 Littoral Rainforests • SEPP 50 Prohibition of Canal Estates • SEPP 62 Aquaculture • Regional Environmental Strategies (REPS) • Local Environmental Plans (LEPS)
Supporting documents	<ul style="list-style-type: none"> • Coastline Management Manual • Estuary Management Manual • Coastline Management Plans • Sydney Regional Coastal Management Strategy (applies to the 16 Sydney coastal and estuarine councils). The aim of the Strategy is to 'protect and conserve terrestrial and

	<p>marine ecosystems in the study area, and to manage the social and economic conditions to achieve this, through the implementation of identified, sustainable coastal planning and management practices. Key themes are:</p> <ul style="list-style-type: none"> • Water cycle management • Nature conservation • Public access • Role of government • Climate change • Cultural heritage • Various Catchment Management Strategies – eg Sydney Northern Beaches Catchment Management Strategy 1997 • National Local Government Coastal Management Policy 1999 • Various Plans of Management (PoMs) such as River PoMs, Threat Abasement PoMs, National Park PoMs, Local Council business PoMs, Catchment Management PoMs.
Lead Agencies	<ul style="list-style-type: none"> • NSW Department of Urban Affairs and Planning (DUAP) • NSW Department of Land and Water Conservation (DLWC) • NSW Environment Protection Agency (EPA) • NSW Fisheries • NSW National Parks and Wildlife Service (NPWS) • NSW Department of Local Government (DLG) • Local Councils

Figure 2.2 The NSW Coastal Policy: Key Roles and Implementation Mechanisms



Source: NSW Coastal Policy p9 (1997)

Table 2.4 Reports supporting increased community role in the DMP

International	Bruntland Report 1987, Agenda 21, GEO 2000, OECD 1991
National policies	NSESD 1992, National Coastal Policy 1995, National Oceans Policy 1998
State Policies	NSW Coastal Policy 1997, Local Government Act 1993 (Amended 1997), EP&A Act 1979 (Amended 1997)
Local Government	National Local Government Coastal Policy
Key Thinkers	Arnstein 1969, Sinclair and Diduck 1992, Kay & Alder 1999

There are many ways for the community to become involved in coastal management:

1. Non-participation;
2. Participation in planning through information supply and awareness, consultation and incorporation of selective concessions;
3. Collaborative management including partnerships;
4. Delegated authority from a higher level of government to a lower one; and
5. Community control (Hale 1996, in Wescott 1998).

For the purposes of this study, it is important to focus on two specific goals of the Coastal Policy – Goals 8 and 9 (see Table 2.5 below). These goals deal specifically with community involvement in coastal management.

Table 2.5 NSW Coastal Policy – Goals 8 and 9

Goal 8 To provide information to enable effective management	8.1 To co-ordinate and integrate data and information collection with management programs to ensure that it meets the needs of management. 8.2 To develop compatible data bases for coastal resource information. 8.3 To ensure that information is made more accessible across all levels of government, the private sector and the community. 8.4 To develop formal and informal education and awareness programs addressing coastal management issues.
Goal 9 To provide for integrated planning and management.	9.1 To facilitate consistent and complementary decision making which recognises the three spheres of government. 9.2 To ensure Government agencies efficiently and effectively implement the Coastal Policy in a co-ordinated and collaborative manner. 9.3 To ensure local government coastal policy and management is integrated and involves community participation and information exchange.

Source: NSW Coastal Policy 1997

Both the NSW Coastal Policy and the SRCMS engaged in extensive public consultation programs including regional workshops and surveys when they were being developed. As discussed in Chapter 1, the NSW Coastal Policy evolved to a large extent from many of the issues raised in the 1992 Legislative Council Report which in turn conducted an extensive public consultation

program. The Coastal Policy states that to be effective it needs to be implemented by both State and Local Government and the community. The community's involvement through programs such as TCM, Coastcare, the Marine and Coastal Community Network, estuary and coastal management committees, conservation groups and resident action groups is vital to the success of the Policy.

Coastal Policy – Annual Reports

One of the key mechanisms for reporting on CZM in NSW is through the Annual Reports to Parliament, which is a requirement under the amended Coastal Protection Act (1998). Thom (1999) argues that it is one way for the Coastal Council to execute its role as a coastal “watchdog”. Annual Reports to the Minister for Urban Affairs and Planning and Parliament assess the extent to which the strategic actions contained in the Policy are being implemented. The plans and reports of Agencies and Councils form the basis of the Report.

In terms of community involvement in the Annual Reports, the 1998-1999 Annual Report contained 50 community submissions and the 1999-2000 Annual Report contained a total of 23 community group, NGO and individual public submissions. The Annual Reports from 1998-99 and 1999-00 provide an indication of information such as:

- which agencies have primary carriage of programs such as DLWC for Coastcare;
- which agencies run programs, such as NPWS’s discovery program; and also
- which Local Councils are conducting community education programs either alone or in conjunction with Agencies or NGO’s.

The Reports do not provide details of any of these activities and there is no attempt to direct any of the community / participation activities into information that could help drive policy. One of the requirements contained in the Reports is a deferral by the Coastal Council to Local Government and State Agencies Annual State of the Environment Reports (SoERs) for more detailed information. It seems this should apply to community involvement or public participation also. A review of a series of SoERs reveals, however, that public participation is seldomly reviewed to the extent of any of the biophysical indicators that allow us to interpret the State of the Environment and subsequently develop environmental management plans. Similarly, a review of relevant Agency websites (such as DLWC who is the lead agency for CZM, EPA and NPWS) indicates that the information available about public participation and community involvement in CZM at this level of government is very scarce indeed.

There was a significant attempt to involve the community in the development of both the Coastal Policy and the SRCMS, however, there is not been a deliberate attempt to deliver a similar level of involvement in the review and implementation of policy, despite opportunities for this to happen. There are two issues that have

contributed to this situation: firstly, there is a lack of resources available to the NSW Coastal Council for engaging in such an activity; and secondly, despite rhetoric to the contrary, coastal management in NSW is primarily a top-down delivery program (author's emphasis).

Through the compilation and publication of the Annual Reports, the NSW Coastal Council has an opportunity to co-ordinate an inventory of public participation for decision-making, not just the 75 respondents to the Annual Report, which represent a fraction of the community involvement in coastal management in NSW. As discussed in the preceding Chapters, 'stewardship' is a cornerstone to sustainable and integrated coastal management. This issue relates specifically to Goals 8 and 9 (see Table 1.6) of the Coastal Policy. John Corkill, the community representative on the Coastal Council, has suggested that there be a S117 Direction amendment to require the NSW Coastal Policy to be "complied with", rather than "considered" (in Thom 1999). If this were to happen, then reports to the Coastal Council might contain more detail.

There are of course, a number of limitations which beset the Coastal Policy. Chapter 1 highlighted issues such as institutional failure associated with the sectoral nature of Australian Governments and a lack of understanding by many coastal managers which may lead to a misunderstanding of the purpose and content of the Policy (after Thom 1999). Another key issue identified by Thom (1999) is:

a politically driven problem where the government (or local government) of the day seeks to push a particular agenda which may override the intentions of other policies, for example the need for job creation. At a local council level this may be seen in a willingness or unwillingness to modify particular planning protocols.

There is a real danger that this may lead to local government authorities overriding specific environmental policies that promote the inclusion of greater public participation in the planning process.

The nature of the Annual Reports is to provide only a summary of information that is available. Rightly, the Reports point to specific Agency annual reports and Local Government SoERs for more detailed information. ***The problem is not that the NSW Coastal Policy is lacking in information about public participation and community involvement in policy and program review decision-making for CZM, it is that there is a need to develop systems for monitoring and evaluating public participation and community consultation because it is such an important component of CZM. As this discussion points out, this information is not being collected and evaluated at a level of government where it can be used to inform and drive CZM (author's emphasis).*** The NSW Coastal Council, under the guidance of the Coastal Policy and the Annual Reports to Parliament, is well placed to design and implement a framework that monitors and evaluates the level and growth of public participation in decision-making for coastal management

as an indicator of progress towards ecological sustainability. The Annual Reports from the NSW Coastal Council may well be the appropriate delivery vehicle for this information.

State of the Environment Reports (SoERs)

Councils are also required to address their implementation of the Coastal policy in the management plans they are required to prepare under Section 402 of the Local Government Act.

The importance of the environment to the people of NSW cannot be overstated: it is consistently rated as one of the areas of greatest interest to us (Bob Debus, NSW Minister for the Environment, in NSW EPA SoE 2000).

In terms of community participation, The NSW SoER uses an Indicator for community attitudes to the environment. The Indicator catalogues 'trends in people's attitudes to environmental issues'. The information is quite limited because it is a descriptor of attitudes, rather an indicator of people's involvement or behaviour in relation to the natural environment.

According to Alexandra, Higgins and White (1998), environmental indicators help decision-makers make informed judgements about the broad environmental consequences of social, economic and environmental policies and plans. They incorporate environmental considerations in the development of long-term, ecologically sustainable economic and social policies. (The role and type of indicators will be described in greater detail in the following Chapter) Social indicators are a key determinant of the pressure on the natural environment, and as the following Table suggests, have seldomly been included as environmental indicators, either in terms of measurement for monitoring and evaluation of participation, in terms of driving policy or in terms of developing and enhancing our understanding of the current condition and pressures on the natural environment. Yet stewardship is heralded in local through to international governance, literature and much of current environmental policy as the key to sustainability. Table 6: (below) presents a summary of the type of 'public participation' or 'social analysis' indicators that are used in various State of the Environment Reports. The description indicates that

while these indicators are present to one extent or another in most SoE's, in comparison to indicators for the natural environment, this area of monitoring and evaluation is extremely underdeveloped.

Table 2.6 Key Indicator themes for State of the Environment Reports

Report:	Themes	Level of Public Participation
ANZECC Indicators 1999	The atmosphere; Biodiversity; The land; Inland waters; Estuaries and the sea; Coasts and oceans; Human settlements; Natural and cultural heritage.	Public participation in natural resource management. Survey of community attitudes and actions by the ABS. Surveying community attitudes is an important feedback mechanism for analysing the effectiveness of environmental policies, programs and education, as well as for judging support for initiatives.
Global Environmental Outlook 2000 (UNEP)	Climate change; Stratospheric ozone depletion; Nitrogen loading; Toxic chemicals and hazardous waste; Natural disasters; El Nino; Forest fires and biomass burning; Human health and the environment.	Talk of PUBLIC PARTICIPATION and the fact that it is being driven by the NGO sector.
British Columbia, Canada 1998	Green economy; Protected areas; Domestic waste; Air quality; Greenhouse gases; Climate change; Surface water; Groundwater; Water use; Species at risk; Forest species; Wildlife, fish; Riparian ecosystems; Toxic contaminants.	
New Zealand 1997	Air; Marine; Climate change; Ozone; Land; Waste, Freshwater; Transport; Amenity; Pests; Weeds and diseases; Energy; Toxic contaminants and contaminated sites; Maori; Biodiversity.	
Australian Capital Territory 1997	Atmosphere: Climate Variability, Air Quality; Water: Water Resource Use, Aquatic Ecology; Land Quality: Landuse and Land Capability, Vegetation Management; Biodiversity: Native Species and their Ecosystems, Threats and Reasons for Change, Conservation Action; Human Settlements: Socio-Economic Structure, Physical Infrastructure, Facilities and Services, Quality of Life.	Specific mention in the report of 'quality of life as an indicator, but no details provided.
New South Wales 1997	Atmosphere; Land; Water; Biodiversity.	Core indicator 5E Towards sustainability - includes community priorities and behaviour; Community surveys detailing attitude, knowledge, skills and behaviour. Surveys compared to ABS info; used for forecasting purposes.

Report:	Themes	Level of Public Participation
Queensland 1999	Atmosphere; Land; Inland waters; Coastal zone; Energy resources; Biodiversity; Human settlements; Cultural heritage.	
South Australia 1998	Atmosphere; Inland waters; Estuaries and the sea; Land resources; Biodiversity; Human settlements; Cultural heritage.	The concluding paragraph to the Introduction to the SoE says: We are all part of society, therefore social, cultural and economic influences shape our individual attitudes and behaviour. There are existing constraints on our choices in the form of the products, services and infrastructures available to us. We can choose to reinforce existing processes or we can encourage change. Achieving environmental sustainability will require a combination of collaboration and innovation by government, industry, commerce and the community.
Tasmania 1997	Atmosphere; Land; Inland water and wetlands; Biodiversity; Human settlements; Cultural heritage; Coastal, estuarine and marine.	Part 2 of the report examines key economic factors in terms of resource management and the environment.
Western Australia 1998	The maintenance of biodiversity; Atmosphere; Land; Inland water (groundwater, rivers, wetlands and estuaries; Marine environment.	Government agencies are currently preparing inventories of their monitoring and research programs. This is being coordinated by The Department of Environmental Protection. In the Forward to the SoE, Hon. Cheryl Edwardes MLA Minister For The Environment, Employment And Training, made a commitment to including 'community' in environment reports to 'bring about a more focussed and effective approach to managing the environment.' In the conclusion to the 1998 SoE, the report says that: "In general, available information shows a steady decline in the condition of the environment and an increase in the pressure humans place on the environment. Community education is required to improve awareness about how we impact on the environment, and to improve our knowledge of how to adjust our behaviour to reduce our environmental impacts." How do you measure this then?

2.6 Environmental Planning and Legislation in NSW

Environmental planning techniques attempt to focus on the interrelationships between people and the physical environment (Luckie 1995). NSW has a series of environmental planning instruments (EPIs) that direct the type and scale of development in the State. In NSW, there are three principle EPIs - LEPs, REPs and SEPPs, all of which are governed by the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Environmental Planning and Assessment Act (1979)

The EP&A Act (1979) is the most important piece of environmental legislation in NSW. It states that decision-makers should take into account the public interest. To facilitate this, one aim of the Act is “to provide increased opportunity for public involvement and participation in environmental planning and assessment” (EDO 1999).

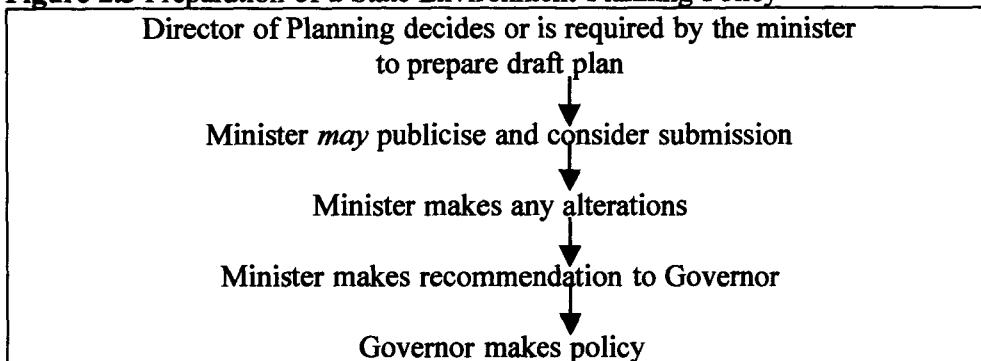
Table 2.7 S.5.c - Objects of the EP & A Act (1979)

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Section 5 of the Act advocates a sharing of responsibility between State and local government for regulating land use and environmental protection. The EP&A Act requires the preparation of environmental planning instruments, including state environmental planning policies (SEPPs), regional environmental plans (REPs), local environmental plans (LEPs) and development control plans (DCPs). SEPPs and REPs are prepared by the Department of Urban Affairs and Planning (DUAP) and Councils prepare LEPs in consultation with State Government departments. DUAP may provide directions for preparing LEPs and assessing development under Section 71 and 117(2) of the EP&A Act (Channell 1996a). The Act also determines the role of local councils in regulating environmental matters. Local Councils are responsible for implementing and enforcing certain State laws in their local area.

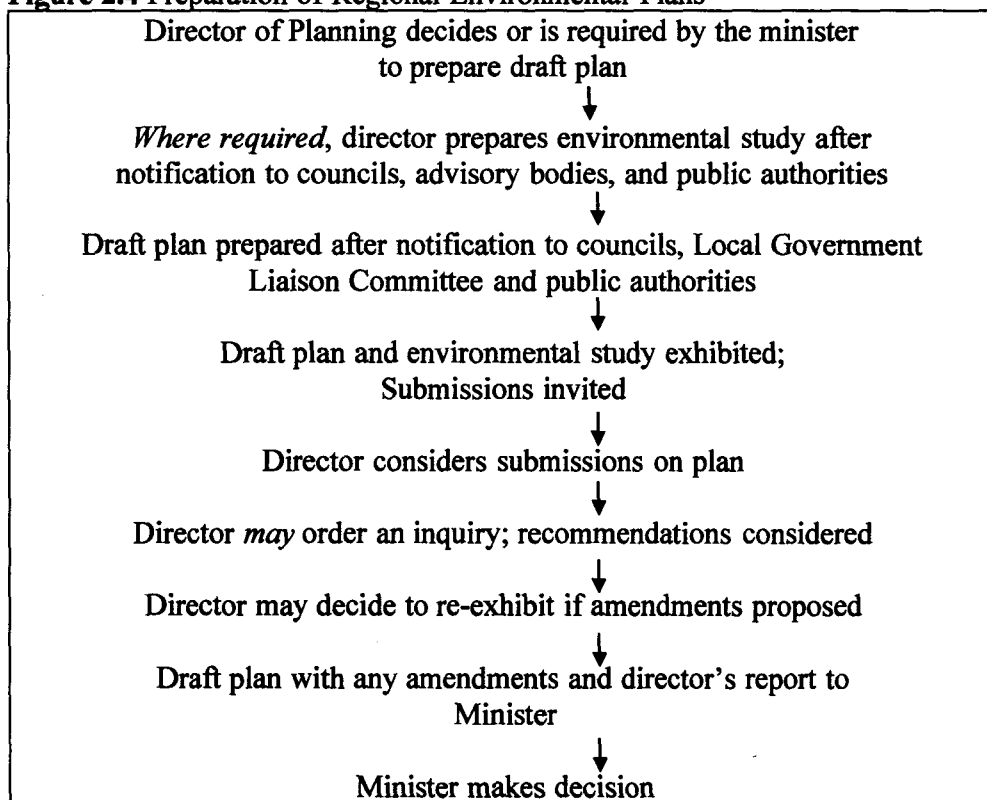
There are opportunities for public involvement at various levels in the preparation of SEPPs, REPS and LEPS. Figures 2.3 and 2.4 (below) show the various stages involved in the preparation of these planning instruments. In NSW, notice is given inviting public submissions in plan development. There is no legal requirement for public comment to be considered when SEPPs are made, although public comment is mostly invited. With REPs and SEPPs, the legislation requires an opportunity for public comment after a draft plan has been produced.

Figure 2.3 Preparation of a State Environment Planning Policy



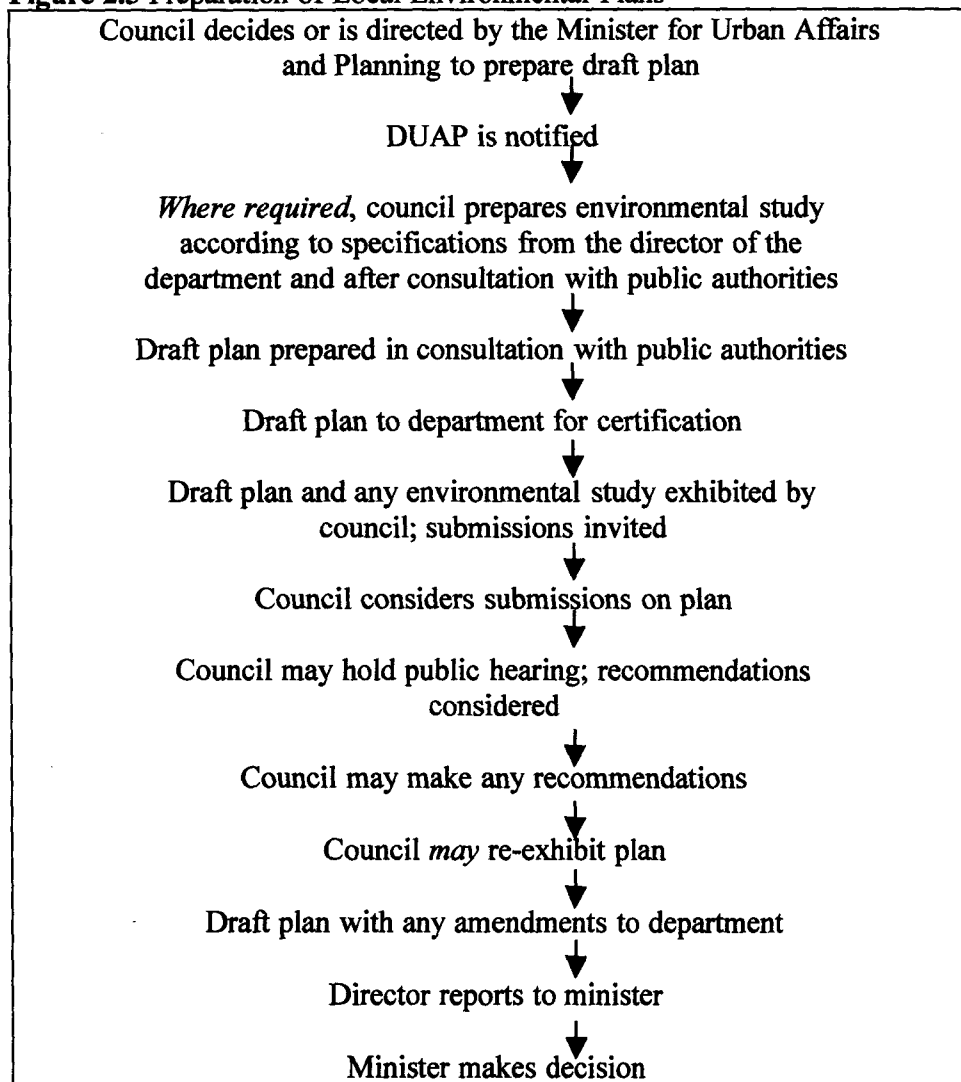
Source: Farrier *et al* (1999).

Figure 2.4 Preparation of Regional Environmental Plans



Source: Farrier *et al* (1999)

Figure 2.5 Preparation of Local Environmental Plans



Source: Farrier *et al* (1999)

The Act provides for third party appeal rights to the Land and Environment Court and for Ministerial intervention to order a Commission of Inquiry into the decision-making process. Farrier *et al* (1999) argue that “participation at the plan-making stage is important because opportunities for later public participation - when specific proposals are made for specific sites - are usually more limited.” The general thrust of planning in NSW is to provide opportunities for participation at the planning stage, but to restrict them when it comes to decisions about specific projects.

“The problem with this approach is that members of the public are generally more likely to participate at the later stage, when they are confronted with a specific proposal on a specific site and can visualise the impact it will have on their lives (Farrier et al 1999).”

Depending on the type of environmental planning instrument (EPI) that applies to the land area and the category of development that the proposed activity falls into, development consent may be necessary.

In order to get development consent, a Development Application (DA) needs to be lodged with the appropriate consent authority - usually local council or the Minister for Urban Affairs and Planning (see Figure 2.6 below).

Where development is occurring or proposed in a coastal zone, there may be relevant LEPs, REPs or SEPPs that apply to the area. There are 6 SEPPs that are relevant to coastal development:

- SEPP 14 Coastal Wetlands,
- SEPP 26 Littoral Rainforest,
- SEPP 50 Canal Estate Development,
- SEPP 56 Sydney Harbour Foreshores and Tributaries, and
- SEPP 62 Sustainable Aquaculture.

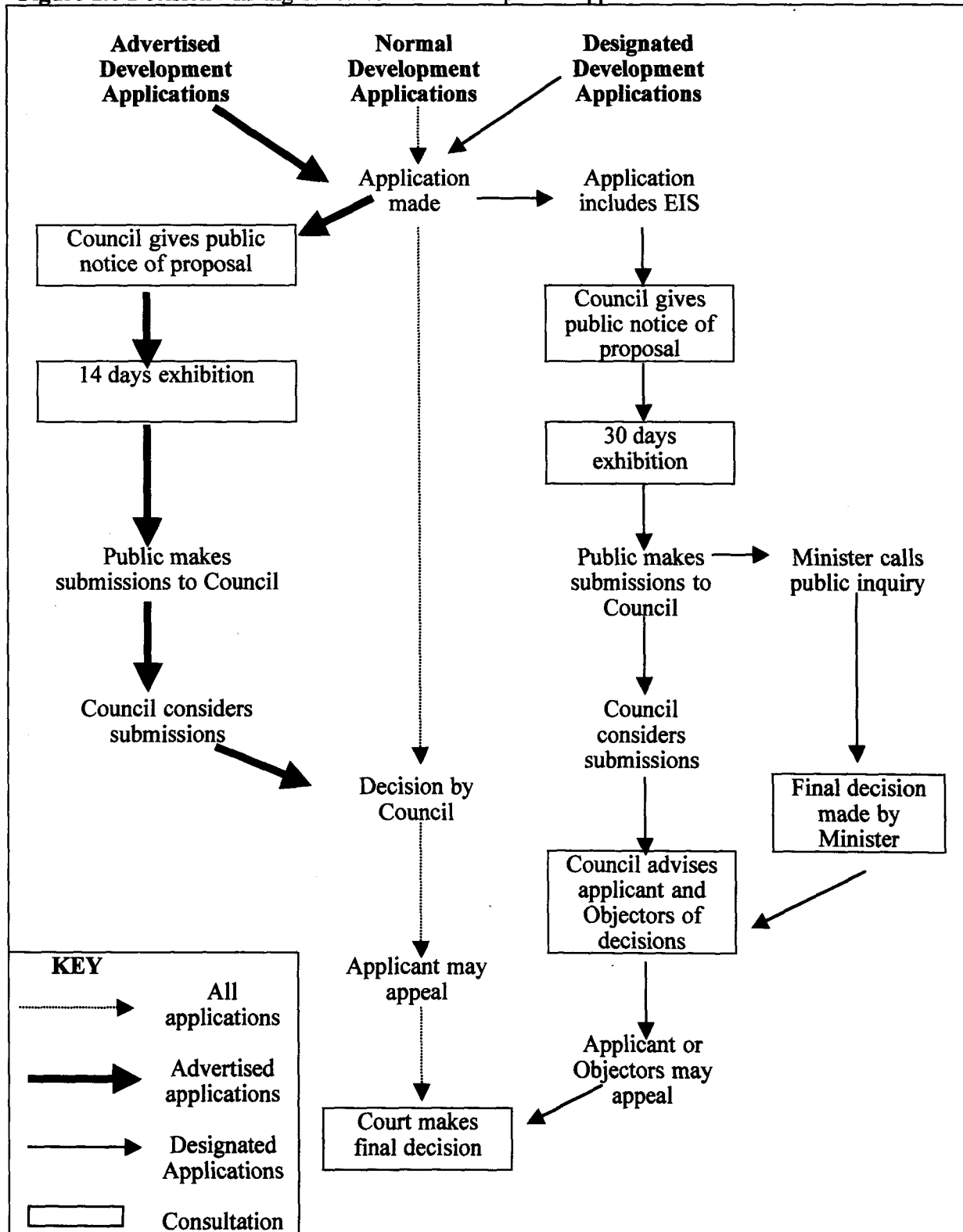
Other areas where development controls can be implemented are in Marine Protected Areas, which can be declared under the Marine Parks Act 1997. Marine reserves may also be declared under the EPBC Act 1999. As well as this, the Fisheries Management Act 1994 (NSW) provides a listing for threatened marine species, populations and ecological communities. Under the EP&A Act, development that is likely to have a significant impact on threatened species or on critical habitat must be accompanied by a species impact statement and must be publicly notified (EDO 2001).

The Environmental Impact Assessment (EIA) Process

In NSW, the EIA process is generally carried out by the proponent (or consultant). The EP&A Act (1979) provides a framework to assess the environmental impact of development proposals. Environmental Impact Statements must be prepared for:

- Designated developments (Part 4, EP&A Act), and
- Activities carried out or approved by public authorities, which do not require development consent but are nevertheless likely to significantly affect the environment (Part 5 EP&A Act).

Figure 2.6 Decision-Making Processes for Development Applications



Source: Luckie (1995)

Stone (1999) writes that the Environmental Impact Assessment (EIA) process is essentially a process for providing input on the potential environmental, social, and economic consequences of making a decision. EIA is not a separate or stand-alone process. Stone argues that the EIA process has improved in five key areas:

1. greater commitment by proponents,
2. improved public involvement,
3. strengthened decision-making,
4. improved post approval phase, and
5. need for a strategic approach to deal with sustainability issues.

There are, however, many counter claims against the success of EISs and their ability to include the public in the decision-making process. Conacher and Conacher (2000) argue that the shortcomings of the process are obvious: the proponent is hardly likely to put the project in an unfavourable light, or recommend that it not proceed, or that an alternative proposal be preferred. Similarly, it is rare that an environmental consultants will turn away work. Pickard (pers. comm. 1999) states that "*it is no secret that EISs are written by technical experts for technical experts,*" written and paid for by developers. This claim is supported by evidence that EISs may be failing in one of their chief aims - communicating information about proposed environmental changes to citizens (Sullivan *et al* 1997). Sullivan *et al* 1996 state that public understanding of EIS meaning is very low, in some cases 'no better than chance (blind guessing). An unreadable EIS not only hurts the environmental protection laws and, thus the environment. It also turns the sincere environmental professional into a kind of 'polluter'. In effect, this boils down to an issue of trust - the quality of the environmental stewardship entrusted to the community (Weiss 1989) is put on trial.

The EIA process is developed around what Connor (2002) describes as the 'DAD' model:

- **Decide** on a course of action,
- **Announce** the decision, and then
- **Defend** the decision from ensuing protests.

This, as a methodology for maintaining and improving environmental quality is very unsatisfactory (Conacher and Conacher 2000). The technique is limited, the methods are *ad hoc* and generally reactive, it often fails to address real environmental issues relevant to local communities, and most often fails to adequately justify proposals or suggest alternatives.

A key criticism of the EIA process and one which is central to the Kempsey Shire Case Study (Chapter 4) is that in most cases, the public is not involved early enough in the process. The timing of the EIA process often excludes the public from having anything other than a cursory role in the decision-making process. The inability of EIS's to inform the public has meant that the public is often unaware of the importance of this planning tool, unless of course, the issue results in a Commission of Inquiry. But this is the exception, rather than the rule.

2.7 Reforms to the Planning System

It is no longer regarded as appropriate to leave natural resource management decisions to the 'secret' confines of technical bureaucrats and their consultants. Limitations on Government funding and 'shifting' responsibilities from State to local government and to the community are trailbreaking a new path for coastal management in NSW (Thom NSW CP AR 1998-99).

Justice Stein, of the NSW Land and Environment Court, argues that governments at all levels in Australia have become almost obsessed with the corporatisation and privatisation of public utilities at the expense of the general public's right to participate, and principles of accountability. Because of this, there is a pervading mentality of never saying 'no' to a proposal, however irrational or environmentally damaging it may be (after Stein 1998, in Conacher and Conacher 2000).

Controversial proposals are massaged, coerced and 'mediated through' to a 'yes'. The changes have all been part of a move to 'privatise' planning decisions, premised on the argument that there is a need to introduce competition into planning. The inescapable result will be a diminution in public participation and an increase in disputes reaching the courts (Stein 1998, in Conacher and Conacher 2000).

Stein believes that the only answer was to remove the politics from planning. He argues that the Legislature should not pass legislation which circumvents planning and environment laws without it being thoroughly examined by both houses of Parliament and being publicly exhibited. (Stein, in Conacher and Conacher 2000).

In 1999, the NSW embarked on a review of its planning system. A Discussion Paper that canvassed a series of options to improve the plan making system under the EP&A Act 1979 in NSW was released. A key feature of the NSW Government review of planning is for 'greater community involvement in plan making (NSW Government 2001). The follow-up document, Review of plan making in NSW White Paper (NSW Government 2001) presented the Government's position on the review of plan making under the EP&A Act 1979. One of the key features of the 'new' planning framework is:

greater community involvement in plan making.

A companion document 'Ideas for Community Consultation' was also released (Carson and Gelber 2001).

The White Paper Review of Plan Making acknowledges many of the difficulties faced by the community in participating in the decision-making process. The Paper recognises that the community, alongside Governments and Industry, plays a role in managing the built and natural environments (after NSW DUAP 2001). Unfortunately, I believe the review has not addressed some key issues. There are a number of fundamental concerns with the White Paper:

- It fails to identify the type and level of public involvement in different decision-making frameworks. Community involvement in the process says nothing about how effectively the community will be involved.
- It fails to provide a mechanism to incorporate community visions in the development of LEPs, REPs and the new SPPs. This is evidence of reformers trying to mend a broken system, rather than seizing the opportunity to fully revitalise the planning system in NSW.
- While providing a series of tools for making consultation work, it fails to recognise the difference between providing tools for discussion and providing a mechanism to get groups to the discussion table in the first instance (after Lazarow in Surfrider Foundation 2001).

All of these issues have been identified to an extent in past reviews of coastal management. Arguably, the White Paper provides an idealistic or theoretical study of potential reforms to the planning system. Where it fails is that it does not provide the necessary impetus for institutional change or adequately establish the process towards the progression to institutional change (after Dovers 2001). Based on past experience and reviews of CZM, this means that the mechanisms for community empowerment in decision-making are unlikely to be realised – and this will not provide for *greater community involvement in planning*.

2.8 Conclusion

Over the past decade or so there has been an increased public expectation for greater involvement in CZM decision-making. What is clear is that there is a growing level of community participation in the process and there is a growing recognition of the need to increasingly involve the community in the decision-making process.

Community consultation and public participation has been enshrined in legislation in NSW for some twenty years. Section 5.c of the EP&A Act (1979) states that one of the key objects of the Act is to '*provide increased opportunity for public involvement and participation in environmental planning and assessment*.' The Act also established the EIA process for NSW. There have been many criticisms of both the Act and the EIA process (see Stein 1998, Conacher and Conacher 2000) and its ability to deliver the necessary framework for public participation in decision-making. Stein (1998) argues that since the late 1980's, *public participation has been diminished and ESD paid mere lip service*" and that the numerous government efforts at watering down the thrust of the Act, "*showed that the bureaucrats and politicians regard public participation as a nuisance which slowed development*."

Social indicators are recognised by the NSW EPA as an important component of the environmental quality measurement and analysis process. The implementation of social indicators is being progressed by the EPA at a state level and in turn, it is being encouraged at a local government level. I believe that the development of social indicators through SoER's is the key to improving the monitoring and evaluation of public participation and community

consultation in CZM. In terms of improving the process, a number of recommendations can be made: firstly, social indicators need to be defined and standardised (see Chapter 3) so that there is a set of indicators that can be reported against; secondly, these indicators need to be built into the SoE process at a local government level; and thirdly, the Coastal Policy must be 'complied with' and not just 'considered'. This last point will aid in the collaboration of information into a database which can then be used within the decision-making process.

Another approach that must be taken is the improvement in practice proposed in the vision for the NSW Government's current reform of the planning process in NSW - augmented through Plan First. As I have pointed out, Plan First suffers from a lack of a consolidated vision for planning in NSW. Further to this, it describes an 'idealised' process for planning, but does not adequately develop the details of how we are to reach it. In essence, it differs little from the current planning framework. It remains to be seen whether the current reforms to the planning process deliver not only the increased levels of community participation that are expected, but also more meaningful participation.

This review has demonstrated that the legislative and policy framework for natural resource management in general, and for CZM specifically does have in place a basic structure to collect, to monitor and to evaluate public participation in CZM. This, however, this is not being done well at all. It is becoming increasingly obvious that key indicator issues for community involvement at all levels in CZM are not being reported against so there is limited information with which to make decisions. One of the key reasons for this is because it has not been a government priority and so there is often very little clarity as to what exactly constitutes community involvement or public participation – the theme of the following chapter.

Chapter 3:

Principles of Public Participation

3.1 Introduction

How to structure a political process which faithfully reflects the informed preferences of the population, in view of the vastly increased pressure on common property resources, is surely one of the most challenging problems facing social scientists and, of course, society generally (Russell & Kneese 1973).

Over the past two decades the system in which natural resources have been managed has progressed through major conceptual changes both nationally and internationally (after Ewing 1999, Kay and Alder 1999). 'Integrated' natural resource management (INRM) incorporates a broad range of considerations into the decision making process in order to provide for a more effective and sustainable use of natural resources for the long term. INRM has adopted the principles of ecologically sustainable development (ESD) and the scale of management has been broadened to include environmental 'systems' or regions rather than 'effects' (after Ludwig *et al* 1993).

INRM today prescribes a decision-making process that incorporates economic, environmental, political and social considerations. To date, the capability of political systems to adopt an integrated approach to resource management has not kept pace with advances in our understanding of ecological systems (after Dovers and Mobbs 1997, Coenen *et al* 1998). Caldwell (1985) argues that as most natural resource management decisions are ultimately made in the political arena, a major advance in the quality of politics is required if natural resources are to be better managed.

This chapter pursues the argument that positive environmental change is indelibly connected to social and political change, which can only be brought about by the involvement of local communities in the environmental management process (after Caldwell 1985). There is a clear assumption that public participation in decision-making positively influences the quality of the choices being made (Coenen *et al* 1998). Significant improvements in environmental and social science monitoring, however, have been put on hold due to a relatively slow take-up of social science indicators, such as the level of public participation, as part of environmental monitoring programs (Burdge 1987). Institutional change at all levels of government as well as a more immediate modification in the design of policies and programs to include more public participation, better training for resource managers, and increased monitoring and evaluation of public participation programs is required.

3.2 Background

The development of CZM over the past few decades has expanded to encourage a far more integrated and holistic approach to management. This process recognises that humans have an incalculable effect on the environment, and that our current way of living is contributing to a rapid destruction of the natural environment (after Underwood and Chapman 1995). 'Stewardship' is seen by many as representing a core part of the solution to better natural resource management (Bosch *et al* 1996, Brown and Spink 1997). Successful public participation strategies (PPS) (see Table 1: below) as a means of encouraging and developing stewardship, are seen by a number of authors as a way of delivering better natural resource management decisions for the long term.

Public participation must play an important role in CZM (OECD 1990, Agenda 21 1992, RAC 1993). As Chapter 1 highlighted, CZM has been the subject of many government and non-government reviews and inquiries both in Australia and internationally, many of which have argued strongly for a greater (though not explicitly defined) role for the public in decision-making for CZM. Public participation in natural resource management is an integral component of ESD at all levels of government operation.

The benefits of public participation have been recognised by many authors (see Sewell and Phillips 1979, Bass *et al* 1995), reports and inquiries (see Table 1.8). Successful participation and consultation programs can yield impressive results for CZM decision-making by delivering greater knowledge to the process, ensuring that plans or policies focus on issues of concern and generating wide public support for program. A synthesis of some of the key benefits found in the literature as well as those from the case studies in Chapter 4 is presented in Table 3.1 (below).

Ewing (1999) states that since the 1970s there has been growing public awareness of environmental issues, forced to a large extent by calls for greater involvement and administrative accountability for environmental protection. Distrust between governments and the governed has been a major factor underlying the growth of the public participation movement, which the late Derrick Sewell identified as resting on two fundamental considerations:

- Ethical considerations - those involved in the problem and its outcomes have the right to be consulted and involved in decision-making; and
- Pragmatic considerations – support for policies and programs depends on those who will have to pay for them (Sewell and Phillips 1979, in Conacher and Conacher 2000).

Table 3.1 Benefits of Successful Public Participation Programs

- Generates a better knowledge base and therefore delivering better management decisions;
- Helps to break down traditional institutional arrangements which hinder effective natural resource management;
- Facilitates participatory democracy;
- Addresses the concerns of all interested and affected parties;
- Identifies new alternatives to be considered;
- Provides a means of identifying and resolving issues before programs are finalised;
- Focuses planning on issues of concern;
- Improves credibility;
- Helps reduce opposition/conflict provided the process is fair and neutral to all parties;
- Reduces the level of misconception/misinformation;
- Helps meet government requirements;
- Acceptance and compliance is increased;
- Creates a better understanding of the program and its objectives and
- Provides additional sources of expertise and information.

See: Coakes 1998, Coenen *et al*, Dovers and Lindenmayer 1997, Conacher and Conacher 2000, NSW EPA 2000a and Dovers 2001.

Unfortunately, there has been a general reluctance by State and Federal Governments to act on Inquiry recommendations (Conacher and Conacher 2000). With respect to coastal management, both the NSW and Federal governments ignored the recommendations from inquiries into CZM in the early 1990s. There are a number of reasons for this.

Firstly, governments have responded to resource management and CZM issues in much the same way as other traditional policy issues and problems. Environmental management issues, it is argued, are different in kind to other policy type issues and do not respond to traditional institutional arrangements for governance (after Dovers and Mobbs 1997). This is happening at all levels of government, although because of their nature, the effects are felt much mostly at the Local Government level, a less so at State Government level, with the involvement of Agencies and the general public, and somewhat remotely at the Federal Level, where traditionally, the public has had very little input into the operations of government. In recent years, there has been a growing awareness amongst government agencies that effective democracy needs to be representative and participatory (NSW EPA 2000a). The NSW Coastal Policy (1997) recognises:

the important role that individuals and community groups have to play in coastal management and that the community wants assurances that governments can accommodate competing demands in a responsible, sustainable and systematic way (NSW Coastal Policy 1997).

Secondly, social changes are not always arrayed alongside economic, biological, and landuse changes in the matrix that leads to the final decision, possibly because social scientists are relative latecomers to the study of ecological systems and have only recently been asked to play a role along with the biological research community in resource management decision-making. This promotion comes with the recognition that decisions about these resources are eventually made in the sociopolitical arena (after Burdge 1987 & Shindler and Cheek 1999). Ultimately, the result has been that the locus of responsibility for INRM has become somewhat

unclear and public participation as an integral component of policy making and programming remains on the periphery of the decision-making for CZM.

3.3 How does Public Participation fit into CZM?

Concepts such as public participation are at the heart of the 'new environmental agenda' for resource management decision-making. Beyond the rhetoric of this new agenda lies the task of putting it to effect. This means moving on from what Dovers and Lindenmayer (1997) describe as 'those abundant, general, glossy avowals of intent' towards fuller, iterative and participatory policies supported by sophisticated research and evaluation. More than ever, so much depends on communities themselves, because government policy has been 'to say more and do less' (Dovers and Lindenmayer 1997). In practice though, public participation strategies (PPS) are not well defined, its parameters often being hard to categorise and therefore monitor and evaluate.

As described in Chapter 1, Integrated Coastal Management (ICM) centres on ways to bring together disparate planning and management techniques and to form holistic and flexible coastal management systems. A core prescription for this is the development and augmentation of systems for monitoring and evaluating CZM policies and programs (after Cullen 1987, Kay & Alder 1999). CZM policy and program decisions are generally made within a strategic framework with a set of standards and criteria for implementation, monitoring and evaluation. Monitoring programs generally use a set of established 'indicators' to report on the effectiveness of policies and programs, including progress towards achieving environmental standards and targets that aim to meet the resource outcome and organisational process goals of CZM.

Environmental Monitoring

Environmental monitoring is generally conducted using a series of indicators (Bosch and Gibson 1996). An environmental indicator can be defined as physical, chemical, biological or socio-economic measures that best represent the key elements of a complex ecosystem or environmental issue (RPDC 2000). Indicators are measured regularly to show trends and changes in the state of a system such as the environment or a population and may evolve as their suitability and applicability is demonstrated (after ANZECC 1998). Environmental indicators simplify and improve state of the environment reporting in a number of important ways:

- Indicators have a well-understood meaning and can be measured regularly;
- Environmental indicators can be an aid to communication, thus the efficiency of decision-making should be enhanced (ANZECC 2000);
- Indicators create a mechanism for integrating environmental information with social and economic information, thus providing a basis for incorporating environmental

considerations in the development of long-term, ecologically sustainable economic and social policies;

- Indicators identify gaps in our knowledge of environmental conditions and trends and can be used to recommend strategies for research and monitoring to fill these gaps; and
- Indicators help decision-makers make informed judgements about the broad environmental consequences of social, economic and environmental policies and plans (after Alexandra *et al* 1998, ANZECC 2000).

Legislation

Monitoring can take place for a number of reasons. Bosch *et al* (1996) argue that there are three different reasons for conducting environmental monitoring:

1. a legal or regulatory requirement;
2. protection against action by a regulatory agency or other interest groups; and
3. it makes good environmental sense, i.e. it helps decision-makers to design procedures to minimise the impacts of particular adverse effects, or to help them in steering their management to achieve particular goals or targets i.e. to make good environmental decisions.

Legislation and regulation are still by and large the core instruments of environmental policy (GEO 2000). These instruments have long been favoured because they promise certainty of outcome - though without monitoring and enforcement programs, this promise may not be realised (after UNEP 2000). As well as this, there are many issues that impact upon resource management that are simply not addressed by the legislative framework in NSW. The legislative framework is often not geared to pick up nuances in environmental management, for example, the NSW Coastal Policy requires that all development proposals in the coastal zone take ESD into account. ESD, however, can be interpreted in many different ways (Thom 1999). There is no standard for interpretation and this has led to a number of cases where the Chair of the Coastal Council has been called to interpret ESD in the NSW Land and Environment Court. Similarly, a regulation might require that a proponent engage in community consultation for a project, but there are no standards or regulations governing the type or method or extent of consultation.

Gardner and Stern (1996) argue that government agencies and businesses that initiate programs to affect the environment sometimes request public participation only reluctantly, and more for public relations purposes than for serious power sharing. People quickly sense this, and the resulting resentment can be highly destructive, both for the program at hand and for potential for future efforts at resource management. It must be understood, however, that as with any shift in the prevailing management structure, change comes slowly (Cullen and Sorensen 1986). These issues reflect the fact that change requires process and the process of institutional and societal change is often slow.

Monitoring Public Participation

Most of the indicators for monitoring the environment focus on 'scientific' considerations of the environment. Table 2.6 in Chapter 2 describes the environmental indicators which are used in a number of Australian and international SoERs. While 'social' indicators are present to some extent or another in most SoE's, in comparison to indicators for the natural environment, there is very little consistency or continuity between reports. The review indicates that this area of monitoring and evaluation is extremely underdeveloped – yet it is our impact on the environment that we are measuring in order to establish the rate of change in the natural system, ultimately, with the aim of protecting the environment. There are very few indicators in use, however, that comprehensively measure the level of knowledge or awareness or action amongst the community with respect to the environment that may lead to actions that address ecological problems.

The underlying assumption is that if environmental issues hinge on human conflicts, then the people directly involved must be included in the environmental management process (Conacher and Conacher 2000).

Despite the release of the Australian and New Zealand Environment and Conservation Council (ANZECC 2000) 'Core Indicators for Reporting on the State of Environment', which included a series of guidelines for surveying 'community attitudes and actions' and the recognition by the ANZECC taskforce that 'the attitudes and actions of individual Australians are an important factor in their impact on the environment', there are significant gaps in the information database. There is currently very little information about the state of public participation in natural resource management in Australia (ANAO 1997, Ewing 1997). Issues affected by population growth and resource use such as:

- human impact on the natural and built environment; social and cultural values;
 - expectations of a growing community; the level of environmental knowledge or values amongst the community; or
 - the level of public / community participation over a particular development issue,
- are not, despite there being a number of programs that collect information on these issues, being analysed and incorporated into the decision-making process because there is no database or collection system that enables this to happen (after Harvey *et al* 2001).

Stankey and Clark (1991, in Dutton *et al* (eds) 1997) argue that there is an inadequate understanding of the values the public has for natural resources and Ludwig *et al* (1993) write that human motivation and responses as part of the system should be studied and managed, and be included as part of the resource management regime because the shortsightedness and greed of humans underlie difficulties in management of resources, although the difficulties may manifest themselves as biological problems.

Public participation as part of the environmental monitoring process has been excluded or only superficially included in programs and policies because of the inability of decision-makers to control potential risks (eg. *a hostile community or lack of publicly provided information*) on the overall program (Bass *et al* 1995, Shindler *et al* 1999). There is growing recognition however, that in order to be consistent with the principles of ESD and to achieve broad public acceptance and political accountability, CZM must take into account social, cultural, community and environmental education considerations (HORSCERA 1980, RAC 1993), and in order to do this a system to monitor and evaluate public participation and community consultation must be developed.

3.4 Who is Public Participation for?

Who is the Public? Who is the Community?

The concept of who 'the public' or 'the community' is and whether they have a right to influence the decision-making process is a topic that has been debated for many centuries. With respect to coastal management, in 530AD Roman Emperor Justinian wrote down the laws of the Empire: "By the law of nature these things are common to all mankind; the air, running water, the sea," and consequently the shores of the sea (Shorelines 1995).

In recent years, the concept that resources held in common, such as oceans, coasts, rivers, air and parklands are subject to massive degradation, was the subject of a lecture series delivered by W.F. Lloyd in 'Lectures on Population, Value, Poor-laws and Rent', delivered in the University of Oxford during the years 1832-1836 (Feeny *et al* 1990). The debate about public, access, rights and decision-making was re-ignited by Garret Hardin's (1968) powerful essay "The Tragedy of the Commons". Hardin described a hypothetical situation – a medieval village – in which villagers, in an increasing effort to gain more profit, continually increase the size of their grazing herds, eventually leading to the ruin of all. The main criticism against him is that Hardin fails to distinguish between 'common-property' and 'free-access' (Berkes, in Hanna *et al* 1996). Hardin's 'tragedy of the commons' is a powerful metaphor about public rights and the case for top-down intervention, but not a very good characterisation of what really happens (Hanna *et al* 1996). Hanna (1990) argues that Hardin was mistaken in both his portrayal of the commons as a free-for-all and in his assessment of the reasons for its abandonment.

Traditional notions of democracy have created a situation in which the public elects a government to represent them and we cast our vote of confidence in our elected officials once every few years. Unfortunately, this institutionalised trust in decision-makers to do the right thing has too often been betrayed and there are many people who want a greater role in the decision-making process. Government survey results show that people of NSW have a very low level of trust when it comes to relying on the Government to provide them with

environmental information (it is interesting to note that this question was not asked by the EPA in the 1997 and 2000 'Who Cares' surveys) (see Table 3.2 below).

To this end, it is important to establish exactly what or who constitutes 'the public' or 'the community'. Conventionally, there are three answers to this question:

- Anyone affected by an issue;
- Who the decision makers decide the public/stakeholders/community to be; and
- Those with the time to make their voices heard.

Connor (2000a) argues that:

"Public" is a plural noun - beware of any statement which uses it in the singular. It is critical to identify the perhaps dozens of public for a proposal, the organisations which claim to represent them, the leaders who seem to speak for them, the media (formal and informal) which reach them, the values, attitudes and beliefs which motivate them, their knowledge...and attitudes...

Table 3.2 Who would you rely on for information?

National environment and conservation organisations	82.7%
Local environment and conservation groups	80.7%
Local councils	70.3%
Schools	67.8%
Scientists and technical specialists	66.1%
Community service groups	59.2%
The United Nations	56.5%
Government departments	50.3%
Family, neighbours, friends, etc	48.6%
Media personalities	37.8%
Religious leaders, churches etc	24.4%
Business and industry	21.8%

Source: NSW EPA (1994) p.6

For many people and groups participation may be restricted for a number of reasons. Bass *et al* (1995) argue that the key elements which appear to determine the degree of participation of any one person or group are:

- Their interest / stake in the activity;
- Their degree of control over decisions; and
- Their powers to act, and to take effective responsibility.

Connor (2001) argues that for any program, it is useful to identify various kinds of publics - one or more people who have a shared perspective on an issue e.g. employees, neighbours, investors, customers, suppliers and, finally, the general public. A useful tool is to distinguish between 'stakeholders' and the 'public'. In stakeholder participation, a stakeholder may be perceived or assumed to have a "legitimate" stake in the outcome and therefore a right to be involved. Other residents have no such claims. In public participation, one assumes that the issue affects all residents in some way, large or small, and that all have the right to obtain

relevant information in an understandable form and to respond to it in a low-risk, low-cost way.

James (1991, in Conacher and Conacher 2000) argues that it is wrong to assume a lack of interest on the part of those who do not participate or who have not previously made their views known. It is much more likely that there are other reasons – including a lack of awareness of the issue, shyness, feelings of inadequacy and so on – which prevent people from participating. Or it may be that a particular public participation strategy is limited in its scope and therefore cannot elicit certain types of information or tap into certain 'publics'.

One of the major problems in any consultation exercise is that those who respond are not usually representative of the community. Conacher and Conacher (2000) argue that it is important to seek views from other sections of the community, and those analysing submissions need to be aware of the backgrounds of people making submissions, because it cannot be assumed that their views cover the range of opinion and interest.

The methods of participation also have a major impact on the ability of groups to participate. This is discussed in more detail in Section 3.6.

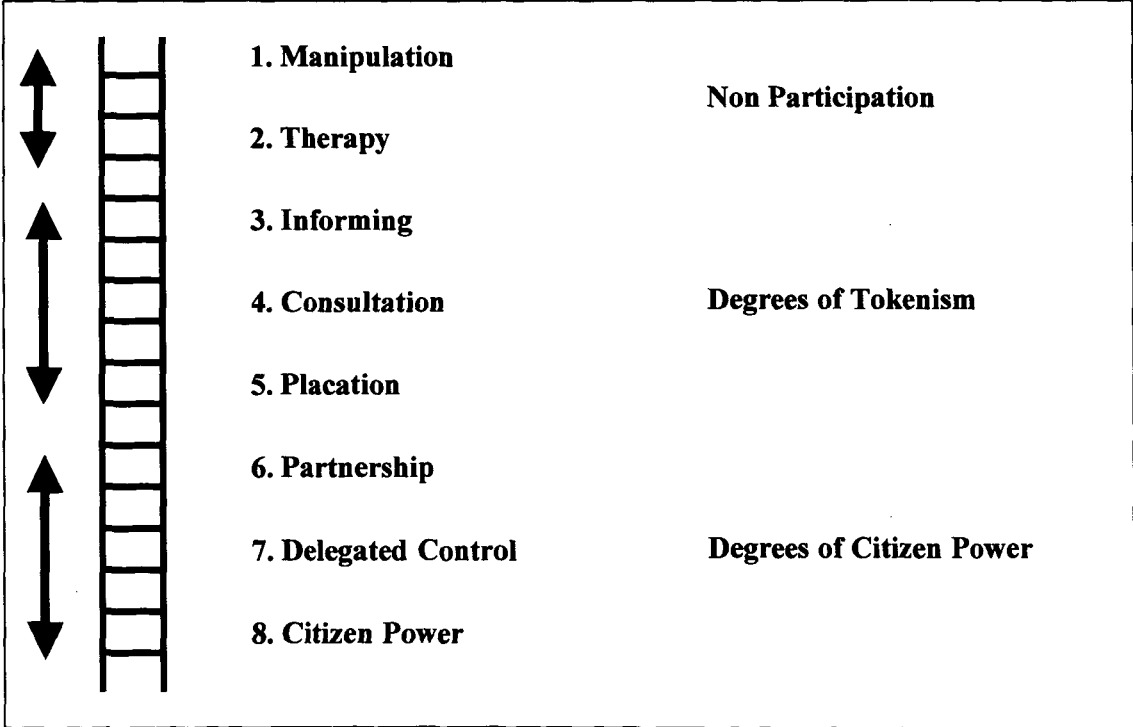
What role should the public have in decision-making?

With respect to environmental decision-making, participants can be individuals like affected and / or interested citizens in general; and the notion can also include interested citizens or groups in some organised form, like target groups, stakeholders, communities, social movements, non-governmental organisations or lower levels of government. A person can be a member of several communities simultaneously depending on the issue at stake, where they live, their profession and their cultural background (Harding 1998 & Coenen *et al* 1998). It is interesting to note that the recent NSW Government White Paper, "Plan First" (NSW Government 2000), which encourages greater community consultation as a core goal of planning reforms for the State, does not identify or attempt to define 'the community' or 'the public'. The Report, "Ideas for Community Consultation" (Carson and Gelber 2000) which accompanied the White Paper, was only marginally more explicit. It is clear, though, that the report imposes a top-down definition upon the process – 'stakeholders will be identified and targeting as required' and therefore has a limited range of influence. Accordingly, a definition of who the community or public is, is in this case intricately linked to the perceived level of influence that they might have in the decision-making process (see Figure 3.1 below).

The ecosystem-based and inclusive nature of INRM decision-making today has modified the operating and decisional paradigm and forced managers to challenge many traditional assumptions about the locus of responsibility for stewardship and decisional control of the natural environment (see Figure 3.1 below). INRM recognises that politics as well as science is an inherent feature of socio-natural systems (Daniels & Walker 1996). And that the

consultation-participation continuum stretches from apparently “passive” consultation to real influence over-decision making, empowerment and co-production which can be very rewarding for the community (after Arnstein 1969).

Figure 3.1 Arnstein’s ladder of citizen participation in decision-making



Source: Arnstein 1969.

There are a number of other such ‘ladders’ that have been developed in recent years. Some of them go into more detail...eg Bass *et al* 1995.

3.5 Objectives and Requirements of public participation

Participation is the process through which stakeholders influence and share control over priority setting, policy-making, resource allocations and access to public goods and services (Shah 2000).

Connor (2000b) argues that this definition implies a shift from advisory public consultation to power sharing and raises the stakes for planners and decision-makers because it advocates a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them. Public participation strategies generally have a number of objectives (see Table 3.3 below). Requirements for PPS should be tailored to suit specific purposes, and will depend on the precise strategy scope, goals, and likely participants. It also depends on political and cultural circumstances (after Bass *et al* 1995).

Table 3.3 Objectives of Public Participation

- To increase public awareness of environmental problems and issues;
- To mutually educate the governors and the governed;
- To reduce suspicion of the decision-making process;
- To seek greater transparency and accountability;
- To tap expertise in the community;
- To reduce conflicts between different interests and seek consensus;
- To ensure that a plan or proposal will be accepted by the community; or
- To redefine the goals of government.

Source: Conacher and Conacher (2000).

Public participation programs perform a set of functions, but importantly, also make a contribution to the process of involvement. In Section 3.5 (above), I attempted to lay the foundations for defining the public or the community. Cullen (1986) states that:

'effective coastal planning and management appears to require an informed and concerned electorate. It is necessary to teach people about the coast so they understand the consequences of building on beaches and of discharging effluents to estuaries and beaches. Without more public understanding there can be little hope of politicians taking professional advice on likely impacts of poorly planned coastal developments, especially when such advice is opposed by developers who claim the ability to lift sagging regional economies with only a little bit of environmental degradation.'

Principles for Public Participation

In many cases, however, decision-makers believe that communities are not prepared to take on an active or vigilant role in the environmental assessment process nor are resource managers skilled or sufficiently resourced to adequately include the public in the decision-making process (after Sewell and Phillips 1979, Dale and Lane 1993). It is at this point that public participation needs to be recognised as more than just a vehicle to engage the community in discussions about resource management and decision-making, but note that it is also a means to educate and upskill the community – a instrument for developing 'stewardship'. A set of core values for public participation has emerged in recent years. Table 3.5 (below) describes a series of principles by which both decision-makers and the community can use to arrive at better decisions which reflect the interests and concerns of potentially affected people and entities. With these core principles at the heart of public participation programs, it may be possible to rebuild some of the bridges of participatory democracy that appear to have fallen in recent years.

It must be remembered that offering participation says nothing about the intensity or direction of communication (Coenen *et al* 1998). Public engagement and civil society have a unique character and every public participation program has spinoff effects for the public eg more awareness of public processes and more skills to apply to future programs (after Connor 1999).

3.6 Methods of public participation

It is not the purpose of this thesis to describe in detail the many methods available for engaging in public participation, however, a variety of methods and summaries will be used to describe some of the techniques that can be used. For a detailed description of methods and their pros and cons, see Pretty and Chambers (1993).

As described, there are various objectives for involving the community in environmental decision-making and no single technique can attain all of them. The range of techniques available is considerable. Each has advantages and disadvantages and some are more appropriate in certain circumstances than others.

The greatest degree of behaviour change occurs when different strategies combine (Gardner and Stern 1996).

It is vital to interpret the term participation and to specifically qualify the type of participation being employed in a particular situation (after Fien *et al* 1999). The literature on public participation is extensive and varied. For example, the United Kingdom Department of Transport (DETR 1998) has developed a 'Fitness of Purpose' matrix (see Table 3.4 below) in order to develop and refine the most appropriate type of public participation strategy for each program.

Public participation in decision-making for CZM can be initiated as a top-down (Agency, Local or State Government run) or bottom-up (individual, community group or NGO run) process and as such, the level of expertise, resources, knowledge and time available to devote to the program may be vastly different. A top-down approach may attempt to reach as wide an audience as possible and so use a range of techniques across a number of areas (see Table 3.6 below), whereas with a bottom-up approach the methodology may be refined to concentrate on only one or two key techniques that are aimed at specific audiences in order to achieve as much 'bang for your buck' as possible. In order to achieve this, a review of the pros and cons of particular techniques such as described by Table 3.7 (below) would be required.

Table 3.4 Fitness of Purpose

Main Purpose			
Steps	Information	Learning	Exchange
1	What is the message?	What is it that the public's input is required about?	What is up for negotiation?
2	Who do you want to reach?	Who do you want to consult?	Who do you want to involve?
3	What is the timescale and how does it relate to the wider process?	What is the timescale and how does it relate to the wider policy process?	What is the timescale and how does it relate to the wider policy process?
4	What training and skills are required?	What training and skills can be taught?	What training/skills? Need for facilitation?
5	What level of resources should be committed?	What level of resources should be committed?	What level of resources should be committed?
6	What mechanisms exist to check that information has reached the target?	What will happen to people's contributions?	Do all stakeholders agree that progress is being made?
7	Any further action required?	Who has authority?	Is joint ownership emerging? Can this be checked?
8	-	What are the feedback mechanisms to the public?	Are mechanisms in place to ensure that the next steps can be jointly planned?
9	-	Any further action required?	Any further action required?

Source: DETR 1998.

Table 3.5 Summary of Requirements for Successful Public Participation Programs.

The Public	The Process	Objectives	Decision-Making	Monitoring and Evaluation
The public should have a say in decisions about actions that affect their lives.	Public participation includes the promise that the public's contribution will influence the decision.	Public participation must be an integral and complementary part of the decision-making process.	The public participation process communicates to participants how their input affected the decision.	Public responses to, and involvement in, the project should be monitored and the course of public participation modified if necessary.
The public participation process communicates the interests and meets the process needs of all participants.	The public participation process seeks out and facilitates the involvement of those potentially affected.	Objectives need to be clearly stated as they differ depending on whether the goal of participation is: information relay; communication; education; or capacity building.	People need to be aware of the extent of the influence of their submissions.	All monitoring and evaluation should be openly communicated to the public.
The public participation process provides participants with the information they need to participate in a meaningful way.	Public participation must be specifically designed for each project to ensure its appropriateness.	A visible program. People, especially politicians, need to know what everyone else believes about how to resolve this issue.	Acceptance - many will agree that something needs to be done, and that the recommendation is better than nothing, i.e. informed consent.	An informed public. If many citizens remain ignorant, they may change their minds later and oppose the program.
The process needs to be open to all interested citizens.	The process should be agreed between the decision-maker and participants.	Majority (at least 66%) public acceptance or support.	Support - some will actively endorse the recommended solution.	Valid - the proposal must be scientifically and technically sound.
	"Scoping" helps to ensure that the main issues are raised early in planning.	Understanding - upto 90% of the population should understand that there is a problem and that something needs to be done about it.		

Adapted from Sewell and Philips 1979, IAP2 1990, Bass *et al* 1995, Sarkissian 1999, Fien *et al* 1999 and Connor 2002.

Table 3.6 Checklist of Environmental Assessment Education Techniques Identified in the Literature

Audio / Visual <ul style="list-style-type: none"> • Film • Slide presentations • video 	Computer-based methods <ul style="list-style-type: none"> • access to electronic data such as newsletter, plans and reports 	Citizen training programs <ul style="list-style-type: none"> • Organised hearing visits • Simulated exercises • Workshops
Publications <ul style="list-style-type: none"> • Brochures • Comic books • Decisions / reasons • Directories and bibliographies • Feature articles • Newsletters • Draft plans / reports 	Public meetings <ul style="list-style-type: none"> • Conferences • Contests • exhibits/displays • lectures/speakers bureau • panels 	Direct / Individualised services <ul style="list-style-type: none"> • direct mail • phone lines • public registries • technical assistance / advice
Media <ul style="list-style-type: none"> • advertising • news releases • news conferences 	Plain language <ul style="list-style-type: none"> • Communication with the public • Legislation • Policies 	Pedagogy <ul style="list-style-type: none"> • integration into existing curricula • participatory drama

Source: Adapted from Sinclair and Diduck 1992

3.7 Current problems with public participation

There are legitimate costs, weaknesses and risks related to the development and implementation of public participation programs. Firstly, there is a fundamental challenge to defining concepts such as public participation. Bass *et al* (1995) contend that it is a contested concept, and so represents neither a fixed set of practices or technologies, nor a model to describe or impose on the world. The question of defining what one is trying to achieve is part of the problem, as each individual or organisation has different values. Secondly, every situation is somewhat different, whether it be the scope or type of program or strategy or the level of government or community at which it is implemented. Thirdly, as a relatively new 'science', public participation has not yet been sufficiently recognised as a means by which the environment can be monitored and policy developed or reviewed. There are many other reasons why public participation fails to play a more significant role in decision-making. Table 3.8 (below) provides a summary of some of these reasons.

Table 3.7 A selective review of the advantages and disadvantages of various participation techniques

	Overarching Purpose: Information	
Technique	Advantages	Disadvantages
Public Meeting	Relatively cheap, can be tailored to larger or smaller audiences, can inform and allow public to let off steam.	May only attract a limited number of people, can be dominated by activists or those most comfortable about public speaking.
Media	If based on a story relatively costless. Reaches wide audience. Quick and inexpensive.	Media may slant the story. Wide coverage but not universal or representative.
Consultation Document	Can act as a starting point for consultation and makes clear the views of the Council.	Often seen as a token gesture. Perceived as expensive. May not be read or understood.
	Overarching Purpose: Learning	
Focus Groups	Opportunity to explore in depth. Can be designed to enable "non-joiners" to find voice. Group discussion as spark for ideas.	Discussion can be directionless. Can only make limited claims about representativeness.
Complaints Schemes	Can help identify recurring weaknesses. Shows people you are serious about listening.	The information provided may not be reliable. Can be difficult to know whether one-off failure or general feature.
Satisfaction Surveys	Easy to conduct and offers access to users of service. Can focus on key issues.	Key is getting the right questions. Danger of people wanting to complain/or say the right thing.
	Overarching Purpose: Exchange	
Visioning Exercises	Can create real sense of involvement. Uses knowledge and understanding of local people. Can build consensus.	Quite time consuming. Can raise expectations. Can be used as an 'end in itself' rather than as a tool for dialogue.
Citizens' Juries	Jury can reflect wider population. Enables informed discussion and deliberation. Can tackle complex issues.	Relatively expensive but depends how it is designed. It may be difficult to define a sharp enough question for the jury to address.
User Groups	Group has knowledge and understanding. The regular dialogue can aid discussion.	Can give only one perspective. User groups can grow too close to the organisation.

Source: DETR 1998.

Experience has demonstrated that social indicators must play an important role in the decision-making spectrum for coastal management. In Australia generally and in NSW specifically, demonstrates that whilst policy makers have been aware of the need to include social data in evaluation programs for the better part of two decades (after Englander *et al* 1977, Gilmour 1978), there has been relatively little evidence of this in the area of coastal management until quite recently and this has been reflected more in theory (Kay and Alder 1999) than in policy formulation and practice. A significant criticism of Plan First, the recent NSW Government amendments to the planning system, is that it attempts to impose a 'consultation umbrella' over a 'reformed' planning process in NSW without simultaneously providing a means to enable 'the public' to participate seriously. Whilst public participation and resource agencies communicating and developing solutions to natural resource management issues together is a

fundamental prerequisite for INRM, there needs to be a mechanism for community groups and individuals to get to the discussion table in the first instance. The proposed government reforms do not provide this opportunity. Without a serious attempt to introduce change from within, the development of 'community consultation' will not fully succeed and the high levels of community commitment goodwill and contributions to coastal management will be replaced by an exhausted and cynical public where volunteers are an endangered species (after Eberhardt, in NSW Government 2000 Coastal Policy Annual Report).

Participation should be part of what an authority does on an everyday basis. As such the costs of participation become tied up with the use of officer time, council facilities and other organisational resources (DETR 1998).

Table 3.8 Reasons for inadequate public participation in environmental decision-making

- Political and administrative decision-makers fear loss of control or power;
- Lack of bargaining or negotiating skills;
- Fear of additional time delays in reaching decisions;
- Cost of review processes;
- Bureaucratic culture is dominated by the pursuit of cost-efficiency and rationality;
- Difficulty of access to key information. *Freedom of Information* legislation (FOI – some cynically say Freedom *from* Information) can be very costly and difficult to access and is therefore used with reluctance;
- Consensus within a community is rarely achievable and therefore a form of 'guided democracy' is preferred by the lead agency;
- Consultation or participation tends to favour middle-class, affluent people;
- People become cynical about being 'milked' for information, or making submissions which are disregarded;
- Loss of political support if decisions go against the prevailing powers;
- Fear of providing ammunition to the 'opposition' (political or environmental groups), or creating unfair commercial advantage;
- Resource professionals often have a low level of understanding about constituent concerns, possess inadequate communication skills and work in a climate of diminishing public trust; and
- Democracy is a myth – it is even seen as inefficient and time wasting in the prevailing economic rationalist context: hence the 'fast tracking' and other prevailing / development processes taking place around Australia.

Source: Adapted from Sarkissian *et al* 1999, Coenen *et al* 1998, Shindler and Cheek 1999, Conacher and Conacher 2000.

Many of the reasons for the institutional failure of public participation programs/strategies are due to the fact that its merits are not fully understood. Criticisms of public participation programs are often based on outdated perceptions of the process and of the benefits that can be derived from public participation programs if they are successfully integrated into CZM policy and program development and review. This is evidenced by a genuine lack of articulate, quantifiable and substantive programs to monitor coastal management policies and programs to improve decision-making and the process thereof (after Ewing 1999, Gilmour 1988, Dovers and Mobbs 1997, Curtis 1997). It is because policies programs are not adequately monitored that they cannot be objectively assessed (after ANAO 1997).

3.8 Recommendations

A different paradigm for public participation

Community involvement in some coastal management programs has grown over the past 20 years. Importantly, there has been a change in the type of activities that the community participates in - from on ground works such as bush regeneration and dune stabilisation - to involvement in education and the management and decision-making process. This has been auspiced through participation in committees of management, including catchment management committees as well as increasing input through the traditional planning framework. Bass *et al* (1995) concluded from a study of over 200 public participation programs that what is most important about public participation programs is not the document or strategy which becomes outdated almost immediately, but the participatory process involved.

An important issue that must be considered is that traditionally, agency personnel have not had to deal with a public that wants to play an ever-increasing role in the management process. Many resource management personnel are not skilled in 'dispute resolution', because in Australia, people like to 'fit in' and have traditionally been afraid to express their attitudes, especially publicly, and therefore there is infrequent opportunity to debate and develop negotiation skills (after Connor 2000c). It is at this point that the participatory process can often break down.

The changing nature of natural resource management has meant that the parameters for success have been redefined (see Table 3.9 below). A central component of the new paradigm for success must be that the 'process' becomes a much more important part of the overall program or policy. The next step is to incorporate this into the decision-making framework.

Table 3.9 Indicators for Success in Public Participation Programs

- | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Enhanced understanding of sustainable development issues both within and between interest groups;• Improved communications within and between interest groups;• Consensus on the main issues, and what to do about them;• Networks of committed individuals and institutions;• Agreements on new roles and responsibilities, made between interests;• Joint actions for sustainable development; and• Greater commitment to action for sustainable development. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Source: Bass *et al* 1995

The key to implementing better decision-making is two-fold: firstly, there needs to be political will at all levels of government; and secondly, there needs to be a steady improvement in the processes involved. A fundamental prerequisite for this is 'time' and 'energy' (or will) – simply put, it is unlikely, despite the current rhetoric, that Local, State or Federal governments in Australia will embark on wholesale institutional change of the process of government in the

near future, especially one that involves giving up certain elements of power and / or leverage. Instead, what we should be planning for is a steady process of change over time.

Better planned programs and policies

Hildebrand (1997) argues that within the developing field of community-based coastal management, value laden terms such as ‘public involvement’, co-management’, ‘power sharing’, ‘devolution’, ‘empowerment’ and ‘participatory democracy’ are used freely and often without care or definition of their real meaning. The current lack of definitive structure of many acts and policies means that public participation is widely open to interpretation.

There continues to be a division of opinion over the extent to which public participation should be required rather than permitted.... There is a danger in Australia that an emphasis on a discretionary rather than a required approach for public participation is leading to a serious diminution in its use and effectiveness (Conacher and Conacher 2000).

Without the up-skilling of agency personnel and the introduction of better planned programs and policies, there is unlikely to be any serious challenge to the current status quo. Presumably, a path forward is to encourage a more prescriptive structure for public participation which goes beyond the traditional forms of consultation, one which would raise the level of practice across the board and also allow public participation programs to be reported on more systematically (presuming suitable resources were dedicated to this end).

Increased monitoring and evaluation for public participation

Monitoring is a key function of environmental management. Monitoring enables us to evaluate whether policy objectives have been achieved efficiently and effectively. Jacoby *et al* (1997) argue that community involvement in monitoring is central to its survival, and as this Chapter argues, a strong argument for effective evaluation remains. The criteria developed by Connor (2002) provide an informative and useful base for assessing public participation programs. Monitoring, provided it is well structured and useful will provide ongoing assessment of a project, policy or program. Unfortunately, there is a:

gross lack of monitoring and evaluating citizen-agency interactions in adaptive systems. To this end the discussion has remained hazy (Shindler and Cheek 1999).

The fundamental shift in natural resource management from ‘reductionist’ to ‘integrative’ has helped provide the recognition for social science as a significant factor in the decision-making process. Participatory processes are adaptive, cyclical, incremental and iterative (Shah 2000), and if well developed, can slide easily into the policy and program development and review arena and provide useful information for management and decision-making. Ongoing assessment that monitors and evaluates the type and quality of information being generated will help to silence much of the criticism levelled by those who don't believe public participation to have a valid place in the environmental management framework.

Better training for Coastal Managers

Community-based coastal management initiatives often rely on the willingness of government to work with non-traditional partners (Hildebrand 1997). The skill in managing a policy or program is to try to reach the right balance. The broadened terms of reference for CZM has served to strain the traditional roles that managers / decision-makers have held as the owners of the technical knowledge required to represent the public interest and to make management decisions without public 'interference'. Many CZM decisions are nowadays made in a climate that requires new skills to be learnt by coastal managers (after McCool and Guthrie 2001, Conacher and Conacher 2000). Without this skill development, the best laid policies and plans will not fully succeed.

3.9 Conclusion

While public participation programs are now relatively widely established for CZM in NSW, this is often in an *ad hoc* manner and the success of programs has in many cases been based more on the goodwill and professionalism of the participants (both community and government or NGO), rather than on any firm notion or policy direction of what public participation was supposed to do or to provide. As the Chapter spells out, there are many reasons for this. If public participation is to succeed, it is imperative that the currently limited coastal monitoring initiatives be combined with a deliberate program of evaluation (after Kay and Lester 1997). Dovers (2001) argues that for the community to have a legitimate input, community groups should be enabled by government funding, empowered by legislation that gives them status and guaranteed financial and human resources to ensure their long-term survival.

While citizen participation and resource agencies communicating and developing solutions to natural resource management issues together is a fundamental prerequisite for CZM, there needs to be a deliberate attempt to welcome community groups and individuals at the discussion table in the first instance. No amount of policy planning or strategic direction at a top-down level will enable successful public participation strategies unless there is an equal effort that enables bottom-up approaches that 'include full and active participation of local communities' early in the process (Edwards *et al* 1997, Berkes 1999). Ultimately a healthy community is integral to the creation of a healthy environment.

Chapter 4:

Case Studies

4.1 Introduction

A broader scope of reference for environmental reporting needs to be developed for CZM policies and programs. It should include the development of indicators for monitoring and evaluating public participation in decision-making, so that non-traditional costs or externalities can be accounted for. Many coastal management plans, strategies or proposed developments have not been evaluated in terms of:

- implementation and success of environmental education programs;
- level of environmental awareness in a community;
- degree to which the public participates in decision-making;
- people's perceived changes in quality of life, standard of living or access to resources;
- financial, social and ecological wealth;
- effects on individuals and the community as a whole; and
- the effect that a policy or development may have on future generations.

These issues bring to life considerations that are less tangible but equally important to scientific indicators in the decision-making process. Social indicators are an integral component of ESD and their development and implementation has been identified as a key trigger for reform for coastal management practice (after Thom and Harvey 2000).

The case studies that follow crystallise many of the issues discussed in the preceding chapters. Each case study approaches CZM from a uniquely different decision-making perspective. The Byron Shire study examines community attitudes to coastal management and the development of a Coastline Management Plan through one of the key issues in the region - coastal erosion in the Belongil area. The Kempsey Shire study reviews the role that members of the public and community groups had with respect to a proposal for an aquaculture development, which included a prawn hatchery at Racecourse Headland, just south of Crescent Head, and a grow-out site on the Macleay River at Kinchela. This case study focuses on the 'process' of involvement that the general public, and the community in Kempsey Shire and beyond, had with regards to the Development Application (DA). It analyses the level and impact of community consultation undertaken by the developer, the level of participation by the community and the outcome of the proposal.

The aquaculture DA for Kempsey Shire was first brought to my attention through my involvement with Surfrider Foundation Australia, a community-based non-government organisation. Surfrider Foundation had serious concerns with the Statement of Environmental

Effects (SOEE) for the DA and in my capacity as National Project Director for the Organisation, I took on an active role in assisting members of the Crescent Head and surrounding community in accessing information and preparing submissions. Early on in the process, I decided that this would serve as a good case study for my thesis and undertook to write it up as such. The Kempsey Shire Study provided me with an opportunity to test the model that is presented in Chapter 5.

At the time of writing, both of the case studies are still ongoing. In Byron Shire, the Coastline Management Plan is not complete and in Kempsey Shire, the Proponent has plans to submit a new DA. In this respect, the intention of this Chapter is to describe the process of involvement rather than specific outcomes. This theme has presented itself as being of paramount importance in the development of public participation programs (after Bass *et al* 1995).

4.2 Background

Byron Shire Coastline Management Plan

(Case study date: Nov 1999 - June 2001)

Byron Shire, situated on the far north coast of NSW (see Figure 4.1) is one of the fastest growing regions in Australia and is a major national and international tourist destination (Ferguson 1996, NSW Government 1997). The coastal areas of Byron Shire are of great regional and national significance (Ferguson 1996). Attractions of the Byron Shire coastal zone include (Ferguson 1996):

- a highly aesthetic landscape, significant as Australia's most easterly point;
- a diverse marine environment containing popular surfing beaches, coral reefs, and whale watching of national and international significance;
- a diversity of flora and fauna, including species protected under the Threatened Species Conservation Act (1995), and species of regional significance and vegetation associations of regional significance;
- Aboriginal cultural heritage areas of regional significance (the area was originally part of the Bundjalung Aboriginal nation); and
- areas of European cultural heritage that are of state and national significance.

Byron Bay is part of a north facing eroding coastline (see Map 4.1 below). The northern littoral drift carries sand past Cape Byron without any significant quantity entering the bay. Past storm events have caused serious erosion around the bay. The area known as Belongil Spit, to the West of the town of Byron Bay, has suffered significant erosion from natural (storms) and human induced (piecemeal coastal fortifications in the immediate area and to the east) causes. The erosion has been progressing for several thousand years and can be expected to continue in the future (after DPWS 1979).

Byron Shire Council (BSC) initiated the development of a Coastline Management Plan in 1999. Key triggers were:

1. coastal erosion;
2. developmental pressure; and
3. the need for a co-ordinated and integrated approach to CZM.

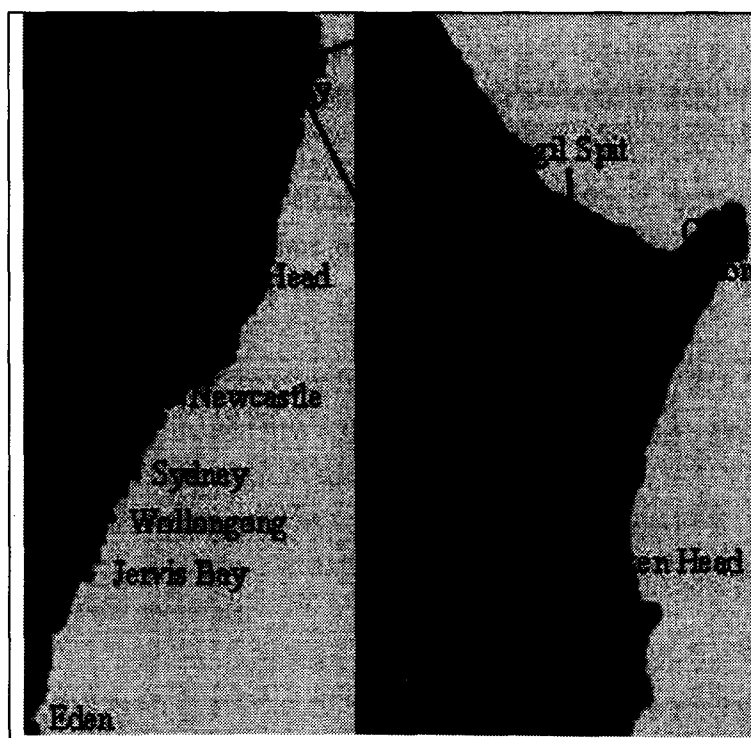


Figure 4.1 Byron Bay and Belongil Spit

The plan is based on the 1997 NSW Coastal Policy and aims to define an integrated management plan for coastal management in Byron Shire that includes State Government Agencies, Council and Community representation through involvement on the Byron Shire Coastline Management Committee.

History and the Community

Severe storms in the 1950's, late 1960s and early-mid 1970s served to focus attention on Byron Shire's coastline (see Table 4.1 below). The aftermath of the storms left houses, roads and other public facilities destroyed or severely damaged. Since the storms in the 1950's, Council and individual property owners' have engaged in piecemeal beach protection works such as placing concrete blocks, car tyres and old cars on the existing dunal system aimed at protecting private property (Eric Wright pers comm., Peter Helman pers comm).

In 1978, the Byron – Hastings Point Erosion Study (1979), the first detailed erosion study of the area, was undertaken. Byron Bay was selected because it was:

'already suffering major erosion problems and was potentially subject to enormous further pressure from beach front development... [and was representative of]... the most pressing problems faced in the north of the State' (Gordon et al 1978).

The study concluded that there was an overall recession trend along the coastline in the area and it recommended an overall management plan for the coastline be developed to protect the coastal environment from piecemeal defence works. Recommendations included a number of possible solutions such as: rezoning; relocation; insurance schemes; and engineering works. Re-zoning of affected areas, the study stated:

'can prevent further inappropriate development and provide a method of encouraging more appropriate development such as transportable housing or caravan parks in erosion-prone areas.'

However, a re-zoning of existing developed areas would lead to a devaluation of assets and possible compensation claims against Council. No cost estimates were put forward for rezoning (DPWS).

Byron Shire Council adopted an Interim Coastal Strategy in 1983. The Strategy applied to:

- All lands within the DPWS designated 100 year erosion hazard zone... and extending out to sea to the outer limit of the littoral drift zone;
- Creeks, estuaries and lakes within 1km of the open sea; and
- Any other area where change of existing land use would have an effect on the present state of the shoreline.

This was to remain in place until the development of a LEP for the area could be prepared. The "Byron Shire Development Control Plan (DCP) No.1 Part J" was prepared and adopted in 1988. The DCP applies to all land in the Shire affected by coastal pressures. Its objective is to provide for the orderly and economic development of the coastal zone while ensuring such development does not adversely affect or is adversely affected by coastal processes (BSC 1999).

Since the early 1980s, a series of developments, both Council approved and illegal, have taken place in the Belongil Spit area (Helman 1999). A number of these developments are in breach of existing Council policy on development within declared erosion zones. Council was involved in numerous Land and Environment Court (L&EC) appeals with residents who have disputed their decisions (Belongil by the Sea v BSC 1985, Holmes v BSC 1985). In one case, the L&EC considered that the actions by Belongil residents of dumping car bodies on the beach was:

'reprehensible, and had the effect of destroying the public amenity of the beach... [and that these actions were] ... illogical and illegal attempts to protect private property... there is a danger of the long-term public interest being sacrificed by personal expediency.'

In an attempt to preserve the visual qualities of the coast and public access to the foreshore, DUAP purchased land on Belongil Spit in the mid-1990s. This was done under the auspice of

the 1990 Coastal Policy, which provides for the acquisition of land under the Coastal Lands Protection Scheme.

In May of 1996, a major storm event caused considerable erosion to the Belongil Beach area. This prompted a consortium of local landowners to propose the development of a revetment (270m long) north of the Manfred St area in front of Belongil beach (see Figure 4.1). Council rejected the proposal and the appeal was taken to the Land and Environment Court later that year. The Court rejected the appeal on the grounds that the proposal was ad hoc, that is, that it did not form part of an integrated management plan for the coast. The Assessor, RR Hussey, stated that it did not:

"seem reasonable that public funds by way of ... subsidies be used to carry out shore protection measures on public land to protect a substantial amount of unauthorised developments. This work which then has the strong probability of causing adverse effect in terms of significant loss of beach amenity for beach accessibility and visual impact..."

Despite the Court ruling, a number of residents initiated privately funded 'illegal' beach protection works along the shoreline. These works adjoined existing beach protection measures that had been undertaken by residents of the area.

In an attempt to preserve the visual qualities of the coast and public access to the foreshore, DUAP purchased land on Belongil Spit in the mid-1990s. This was done under the auspice of the 1990 Coastal Policy, which provides for the acquisition of land under the Coastal Lands Protection Scheme.

Table 4.1 Chronology of Events

Date	Event
1885	Land on Belongil Spit was subdivided and converted to freehold land by the Department of Lands.
1906	Belongil incorporated into Byron Shire.
1913	Meatworks established.
1928	Second Jetty constructed (old jetty partially dismantled).
1954-1962	Home for fishing and whaling fleet.
1954	Cyclone destroys jetty.
1963-1969	Beach area mined for zircon and rutile.
1967	Severe storms.
1974-1975	Severe cyclone and storms in February, May-June.
1978	Byron – Hastings Point Erosion Study undertaken by DPWS.
1983	Byron Shire Council adopts 'Interim Coastal Management Strategy'.
1988	Heavy rains and storms cause flooding at the mouth of the Belongil Creek.
1988	Byron Shire Development Control Plan No.1 Part J, (addressing coastline planning and development issues) prepared.
1988	Byron Shire LEP released.
1996	Severe storms.
1996	DA 96/257 for 'dune stabilisation works' - specifically the construction of an armoured sea wall and beach skimming.
1996 (Aug)	DA dismissed; Appeal refused.
1996 (Nov)	WP Scott v BSC Land and Environment Court. Appeal dismissed.
1996-1999	Numerous illegal rockwalls constructed along the Belongil.
1998	Coastline Management Committee formed.
1999	Council receives funding to initiate Coastline Management Plan.
2001 (Feb-Mar)	Severe storms erode sections of Belongil. DLWC inspected the site with Council and approve work to: (1) provide protection for the toe of the dune area and (2) to provide safety to the public in the area in front of the First Sun Caravan Park. In conjunction with this, Council installed signage along the beach to alert the public to the danger of an unstable dune face, which has continued to slump since the storms.

Source: Adapted from Helman 1999, Wright 1999 pers. comm.

One of the key factors which allowed these piecemeal protection measures to proceed was that in the event of an emergency - danger to human life or private property - the NSW Police and State Emergency Services Department (SES) could override the NSW Coastline Management Manual (1990) and Council policy which stated that no hard structures could be used for beach protection measures. In two separate incidents, in 1996 and 1999, rocks were placed on beaches to protect private property after heavy storms. According to the Belongil Dunecare Group:

"...the police ordered Council to build a revetment area with sandbags - which was OK, because it was a soft option.... and then the private landowners cut a hole in the dune, drove backhoes onto the beach and constructed an illegal rockwall." (Smisek & Walters 1999 pers. comm. 21 November).

In 1997, Council was advised by the Department of Land and Water Conservation (DLWC) of the need to prepare a co-ordinated and balanced long-term management plan for Byron Shire's coastline (DLWC 1999). Council advertised for community membership to a newly constituted Coastline Management Committee and 12 representatives, including a range of community stakeholders, were invited to join the committee in April 1997 (see Table 4.2 below). The Committee's charter was to develop a Coastline Management Plan for the Shire to replace the haphazard remediation strategies that had long term detrimental effects on the coast. In the interim, DLWC the Crown Land Manager for the Belongil area agreed to implement a 'band aid' solution to the erosion problem and construct 'temporary' sea walls in most affected areas until such time as the Coastline Management Plan could be implemented. As well as this, Belongil residents who had constructed illegal rockwalls were allowed to have these remain in place. DLWC resolved that while it did not:

"generally support the construction of piecemeal seawalls such as these, in this instance it did not wish to impede commencement of works to protect threatened properties. The current proposal will satisfy the concerns of the residents in the short term" (DLWC 1999).

Table 4.2 Byron Shire Coastline Management Committee

Government Representatives	Community Representatives
<ul style="list-style-type: none"> • Council Staff • Councillors • DLWC • DUAP • NPWS 	<ul style="list-style-type: none"> • BEACON (Byron Environment and Conservation Organisation) • Belongil Progress Association • Cape Byron Headland Trust • New Brighton Progress Association • Suffolk Park Progress Association • Surfrider Foundation

A key issue for the Belongil was that many members of the community believed the actions of the Belongil Residents to be highly illegal and put pressure on BSC to remove the rockwalls. Members of the Belongil Beach Dunecare Association were of the view that Council and a few private landowners had a complete disregard for the larger community's right of access to the beach area (Smisek & Walters 1999 pers. comm. 21 November). In a few cases, gates and fences had been erected and signs warned of threats of prosecution if people trespassed on 'public land'. The Belongil Dunecare Group was critical of Council, believing them to have been incredibly lax in controlling illegal development in the area.

"Council is high on rhetoric and poor on performance." (Smisek & Walters 1999 pers. comm. 21 November 1999)

In an emergency motion to Council, the Belongil Residents and Ratepayers Group (1999) stated that any solution other than rock was unsuitable and a complete waste of money. They

argued that a primary cause of the massive erosion scarp at Belongil was the groyne in front of the town swimming pool, which in 1996, Council had voted to retain. To this extent, the Group believed that Council's decision (to leave the groyne in place) was a key cause of the current erosion problem.

According to Richard Hagley, an engineer with DLWC's regional office in Alstonville and a member of the Coastline Management Committee, there are three potential options for coastal management in the Belongil area:

- planned retreat with voluntary purchase, in accordance with Council's current plan;
- protection eg. revetment walls from Clark's Beach in the East to Belongil Beach in the West; and
- major nourishment by itself or with groyne and / or islands (Hagley 1999 pers. comm. November 22).

Hagley believes that option two, which will result in end wall effects and no beach over time, will be unacceptable to the local and broader community.

Kempsey Shire – Aquaculture Development Application

(Case study dates: January - June 2002)

Kempsey Shire, situated midway between Sydney and Tweed Heads on the New South Wales coast (see Figure 1.1) is a predominantly rural shire populated by a series of small towns and villages. In March of 2001, a private company, South West Rocks Aquaculture Ltd (SWRAL), supported by the Macleay Economic Development Trust put forward a Development Proposal for an Aquaculture Facility. The proposal involved the development of:

- a marine hatchery at Crescent Head; and
- a prawn and fish farm and processing facility at Kinchela on the Macleay River.

The proposal was in an area identified by the North Coast Aquaculture Strategy (NSW Government 2000). As a State Significant Development it required approvals from a number of government agencies and Kempsey Shire Council. The proposal was not a designated development so no environmental impact statement was required, however, as it was a Class 2 aquaculture development, a Statement of Environmental Effects (SOEE) was required.

A State Significant Development is determined by the Minister for Urban Affairs and Planning as the consent authority. The EP&A Act (1979) requires DUAP to send copies of submissions to those government agencies that have a concurrence role eg DLWC. As well as DUAP, specific aspects of the proposal required approvals from:

- NSW Fisheries (under the Fisheries Management Act 1994);
- NSW NPWS (Threatened Species Act 1995);

- Environment Protection Authority (under the Protection of the Environment and Operations Act 1997); and
- Kempsey Shire Council (under the Roads Act 1993).

Required Consultation Process

A notice in the Macleay Argus on March 23, stated that the DA and the SOEE could be inspected from Monday 26 March 2001 until Tuesday 30 April 2001 at:

- Department of Urban Affairs and Planning in Sydney;
- Nature Conservation Council of NSW in Sydney; and
- Kempsey Shire Council.

The notice reads:

*You are invited to make a written submission on the Development Application.
If you object to the proposal, you must state the reason(s) in your submission.*

The North Coast Sustainable Aquaculture Strategy from August 2000 is the first of a number of such strategies that will be developed under a set of guidelines established within State Environmental Planning Policy No. 62 - Sustainable Aquaculture. The Strategy outlines an 'Integrated Approval Process' for this scale of development. As such, the proponent was required to consult with the public:

- during the preparation of the DA; and
- if appropriate, the developer must meet with the community to explain the proposal (no further detail is provided).

Table 4.3 Chronology of Events

January 2001	Crescent Head Ratepayers Association first made aware of the proposal.
February 20	1 st Public information evening organised by the Crescent Head Malibu Rider's Club
March 20	2 nd Public information evening organised by the Crescent Head Ratepayers Association.
March 23	DA lodged with DUAP under Section 78A of the EP&A Act. Proponent was South West Rocks Aquaculture Ltd for land at 711 Point Plommer Rd, Crescent Head, and South West Rocks Road, Kinchela, within the Kempsey local government area. The proposal involved the development of: <ul style="list-style-type: none"> • a marine hatchery with the capacity for 40 million fry / year (at the Racecourse Headland) site and; • a prawn and fish farm and processing facility (at the Kinchela site).
March 23	Public advertisement in the Macleay Argus. Notice given that the DA and SOEE could be inspected from March 26, for a period of 30 days. Public invited to make submissions.
April 3	Community strategy meeting held. A 'publicity committee' and a 'concert committee' were formed. At this meeting, the group decided to incorporate with the North Coast Environment Council (NCEC), a peak NGO, and form a member group to be known as the Crescent Head Ratepayers and Residents Association. A subcommittee of this Association was created and named SORE (Save Our Racecourse Environment). Local MP, Andrew Stoner, writes to Minister for Urban Affairs and Planning in support of the concerns of the local residents.
April 5	Ocean Watch Australia writes to Minister requesting extension of the public exhibition period for the SOEE. Extension granted through to May 14.
April 10	Kempsey Shire Council resolves not to support the DA until further work is done.
April 19	DA process halted. DUAP, EPA and NPWS request further information from proponent.
April 21	Open Day Concert/Protest was held at Racecourse Headland. Two local television stations attended the event and a local newspaper and the local MP spoke out in opposition to the DA.
June 6	SORE officially notified that the Applicant, South West Rocks Aquaculture, has withdrawn the DA.

The Community and the Consultation Process

The Crescent Head Ratepayers Association was first made aware of the proposal through a leaked source in early January 2001 (Valk 2001 pers. comm. April 9) and it was discussed at the February Ratepayers meeting. On February 20, the Crescent Head Malibu Rider's Club held a public information night for the community. Public knowledge about the development grew relatively quickly due to the fact that Crescent Head is a small community and a core group of individuals who were against the project, mobilised themselves and developed a network in a relatively short period of time (Valk 2001 pers. comm. April 9). A second public meeting organised by the Crescent Head Ratepayers Association was held on March 20.

The public meeting on March 20 was advertised via a notice in a letterbox drop. The proponent and an aquaculture specialist employed by SWRAL were invited to, and attended the meeting. At the meeting an informal ballot was held, where the participants informally voted on the DA (see Table 4.4 below). At the conclusion of the meeting, a vote was taken (56 to 0 (8 abstentions) to hold a demonstration at Racecourse Beach in the coming weeks.

Table 4.4 Results of the Informal Residents Vote on the Aquaculture Proposal

For	Against	Abstentions
1	62	9

Following the March 20 public meeting, a number of local residents and members of the Ratepayers Association began a campaign to raise community awareness about the issue. The result of this effort served to raise the profile of the DA within the community and amongst concerned individuals and groups within Australia and overseas. Crescent Head and Racecourse Headland are home to world famous surfing beaches and publicity about the DA spread quickly through the national and international surfing community (C Tola 2001 pers. comm. 13 May). A range of techniques was used (see Table 4.8 below). As well as this, SORE made representation to Andrew Stoner MP, member for Oxley and to Ian Cohen MLA (2001 pers. comm. 6 April). Both Members asked a series of questions of the Minister for Urban Affairs and Planning (consent authority) in Parliament on behalf of the group (NSW Legislative Assembly 29 May 2001, NSW Legislative Council 5 April 2001).

Following the release of the DA, a letter was sent by SORE to the Director General of the Premier's Office petitioning for the DA to remain on exhibition for a longer period of time because of school holidays and floods in the area. No response was received. After numerous phone calls and follow up letters, a few days grace were granted by DUAP. After pressure on the Department from Ocean Watch Australia, a fishing industry funded NGO, an extension was granted to May 12. Ocean Watch's request was based on the following considerations:

- The public exhibition period ran over the school holidays;
- Local access to the document has been limited (only one copy of the SOEE available at Council - photocopying not permitted); and
- There were concerns that the developer had misled the community at one of the public meetings.

In total, DUAP received 161 individual submissions, 400 'form submissions' and 1931 petitions against the proposal.

On April 19, the approval process was officially halted. Three Agencies, DUAP; EPA; and NPWS notified the Applicant, SWRAL, that more information was required. As well as this, Kempsey Shire Council, at a meeting on April 10, 2001, advised the Applicant that support for the DA would be put on hold until the matters listed in their report were adequately addressed.

Table 4.7 provides a summary list of environmental, economic and social issues that the SOEE had not adequately addressed. To this end, the Agencies and Council advised the proponent that the DA in its current form was incomplete.

At this stage, three options were presented to the developer:

- Withdraw application
- Withdraw application, amend and resubmit
- Withdraw application and submit a new proposal at a later point in time.

The developer chose to withdraw the application.

4.3 Data collection and analysis

Byron Shire

Background

The combination of biophysical, management and planning, and community involvement in the decision-making process - typically reflect the key problems in coastal management today, as described in Chapter 1 of this thesis (see Table 1.1) and fits neatly into the 'resource outcome' and 'organisational process' categories identified by Englander *et al* (1977). Further to this, the NSW Coastal Policy has identified these as key focus issues for the State (see Section 1.8).

The purpose of conducting the surveys was to gather a sample of opinions from residents about the following issues:

- issues of importance to them in Byron Bay;
- erosion and beach protection generally;
- community awareness about environmental management;
- community involvement in management;
- the role and responsibility of Council; and
- the Belongil Beach erosion issue.

The importance of community involvement in decision-making for coastal management cannot be understated. As mentioned in Chapter 1, greater community-based management, public participation and consultation has been identified as one of the four key triggers for reform in coastal management (Thom 2001, Thom and Harvey 2001) and without reference to the social and cultural environment, we cannot effectively manage coastal resources (Stratton Report 1969, Ehler, in Kay and Alder 1999). The issues I examined in the surveys reflect many of the key coastal management issues in NSW.

Why target residents?

One of the challenges facing Byron Shire Council (BSC) in the development of its Coastline Management Plan is the need to balance competing social needs with environmental outcomes – all within the resources available to Council. In this thesis, I have put forward the argument that greater public involvement in decision-making will provide for more and better choices for the community and this survey provided me with the opportunity to test this.

By targeting residents rather than visitors, I believed I would collect specific information from a target audience (see ‘methods’ section below). Connor (2000a, 2001) argues that it is always useful to identify various kinds of public – he argues that ‘public’ is a plural noun. Byron Bay has a high transient tourist population - and the purpose of the survey was to gather a sample of opinions from residents of Byron Bay about a range of issues. This meant I needed to institute a series of control measures in order to specifically target local residents. These are discussed in the section below. A key issue for me was the legitimacy of the results, which is directly related to the source of information, considering that some stakeholders may be perceived or perceive others as having a *less legitimate* stake in a particular issue or outcome. The development of the Coastline Management Plan relied on specific stakeholder involvement through the Coastline Management Committee and more general ‘public’ involvement through a series of public meetings over the life of the project. I believed it reasonable to assume that the ‘public’ that would attend the public meetings, would consist mainly of permanent residents, and it was this ‘public’ I intended to target in my research.

Survey design

The most efficient and effective (time, cost and results) method by which I could obtain a ‘snapshot’ of local residents views over a range of issues was to conduct an interview-based survey in the town of Byron Bay. As a student with limited time and funds for fieldwork, it was important to get a high response rate so as to get the most information from the research. Interviews are commonly associated with research methods that seek to explore subjective meanings and issues (Bannister *et al* 1996), for example, questions 19 and 20 (see Appendix 2), which explore values-based and hypothetical situations.

The method used to select respondents is referred to as a ‘convenience sample’ (Bainbridge 1989, Alreck and Settle 1995). A ‘convenience sample’ allows respondents to be selected simply because they are available for polling. This type of sampling, says Bainbridge (1989), serves the convenience of the researcher rather than the scientific accuracy of the results. I was interested in obtaining an idea of the range of responses that people had to a particular question, rather than being able to generalise from my sample to the rest of the Shire’s population. Convenience samples are usually far cheaper to conduct than random or

probability samples of the population would be. The cost and time involved in conducting a more intensive sample was not justified by my intended use of the data.

As it was my intention to target residents rather than visitors to the area, the control I instituted was to interview people working in shops, rather than approach prospective interviewees in the street, as I believed that this would generate a higher percentage of residents. Further to this, I undertook the surveys over five weekdays during in November 1999, rather than on the weekend when there might be more tourists in the area. The clustered nature of the survey (using the town rather than the whole Shire) allowed me to conduct a high number of surveys in a relatively small amount of time (after Alreck and Settle 1995). I believe that the results illustrate the effective design of the survey – in total 46 surveys were completed, with permanent residents comprising 87% of respondents, 61% having lived in the area for five or more years.

Benefits and costs

Interview-based surveys have both benefits and costs (Bainbridge 1989, Alreck & Settle 1995). Probably the main consideration is that the very nature of the technique – time and location based surveys may restrict the participation of people who might otherwise be legitimate participants. This issue was discussed in detail in Chapter 3, Sections 3.4 and 3.6.

Bainbridge (1989) writes that people are generally polite to a poll-taker who approaches them, thus interviewers tend to get a good response rate. If properly prepared before going out into the field, the interviewer can explain some of the words in the question when respondents are not familiar with them. Both of these issues were of concern to me. Also, there were a number of questions where respondents asked for a clarification of definitions, roles and terms (eg question 6a, 11 and 13). Further to this, on a number of occasions, respondents provided me with valuable information over and above the requirements for answering the survey questions. This could not have been achieved if the survey had been mailed out. The open-ended timeframe for the completion of each survey and emphasis on the qualitative nature of information being collected allowed the interviews to progress to a high level of detail in many cases. For example, the time taken for participants to complete the surveys varied from twenty minutes to one and a-half-hours. On a number of occasions, the surveys turned into small community meetings where people would 'have a go' at Council or discuss another issue. On almost every occasion, interviewees used the opportunity to raise issues of concern to them - some very distantly related to coastal management, while others such as sewage and stormwater were commonly referred to.

There are of course costs such as leading the respondents or respondents tailoring their answers to the kind of person he or she believes the interviewer to be (Bainbridge 1989). With due consideration, I attempted to act in a neutral manner, neither supporting nor condemning the

answers of ideas raised by the interviewees. Dress code was also an issue. It was important for me to be well presented, but not too smart.

Content

The survey consisted of twenty-three questions (see Appendices 1 & 2). A draft survey was sent to Professor Bruce Thom, Chair of the NSW Coastal Council, for comment and review. In the discussion earlier in this Chapter, reference was made to the similarities between the key focus issues for the NSW Coastal Policy and the coastal management problems in Byron Shire. By inviting input from the NSW Coastal Council into the design of the survey, I believed that it would be a significant opportunity to 'value-add' to the study. Professor Thom was supportive of the survey and suggested a number of areas where questions could be further developed in order to elicit more specific information from respondents. These changes were duly made and a final survey design was completed.

Methods

The author conducted all surveys. In order to reduce bias and improve the overall success of the surveys, the author followed a number of interview and survey guidelines that related to privacy issues, approaches to asking questions, recording answers and not giving opinions, which have been discussed by several authors (Cannell 1985, Smith 2002, Weisberg and Bowen 1977). Each time I approached a potential interviewee, I would identify myself as a student from Macquarie University and present the interviewees with a 'participant information form' (see Appendix 1). Firstly, the form identifies my university, Macquarie University, as the institution with responsibility for the survey. Secondly, it explains the confidentiality clause, which states that all information will be de-identified and only summaries will be made public. Lastly, the form explains that the ethical aspects of the survey have been approved and that if the interviewee has any complaints, they are provided with a contact phone number for the university Ethics Committee.

Byron Bay has two main streets, Johnson St, running North-South and Lawson St, running East-West. I began sourcing interviews on Johnson St, just north of the train station and continued in a northerly direction until the beach (and the end of the shops). I then made my way down the other side of the street and turned left into Lawson St and continued in an easterly direction to the end of the business district. Following this, I made my way along the southern side of Lawson St and turned left into Johnson St, heading in a southerly direction until I was parallel with my starting point

In order to maintain a deliberate pattern with the sampling procedure, I decided to enter every third premise and asked the person working in the shop / premise if they would participate in the study. If the person responded positively, I undertook a survey and continued on

accordingly. If the person refused to participate in the study, I then entered the next shop / premise (rather than every third) and so on, until a survey was completed. Then I returned to every third shop / premise. The majority of the survey forms were completed on the spot, however, on a number of occasions, I had to come back later to collect the information.

Survey Findings

Erosion, beach protection and beach conditions (Questions 4,5, 15-18)

Can you tell us which of the following issues are important to you in Byron Bay?

Issue	Very Important (5)	Important (4)	Neutral (3)	Not Important (2)	Don't Know (1)
Car bodies placed on the foreshore for beach protection (40 respondents = 87%)	16 (40%)	5 (12.5%)	7	9	3
Rocks/boulders placed on the foreshore for beach protection (42 respondents = 91%)	17 (42%)	7 (16.7%)	11	3	4

The issue of shoreline protection is of high importance to the residents of Byron Shire with 52.5% of those surveyed saying car bodies placed on the foreshore was an important issue and almost 60% saying the same about the use of rocks or boulders.

Fifty two percent of respondents were in favour of further development in Byron Bay. Of these respondents, 92% favoured the development of some sort of beach protection measures. The question (5) may have been somewhat misleading because a number of people stated that they did not consider beach protection measures to be classed as 'further development'. This needs to be interpreted with the knowledge that while 52% of respondents believe there should be further development in the Shire, 32% were against any further development in the Byron Bay area.

With respect to beach conditions, 90% of respondents noted that there had been a change in beach conditions in recent years. 100% of respondents indicated that there had been a reduction in beach size, personal opinion as to why this was the case varied considerably. Seventy one percent of respondents are aware of attempts to modify beach conditions. Respondents were generally aware that Council, the SES and local property owners had erected property protection measures at Belongil - these included legal and illegal work being carried out. Thirtyseven percent of respondents indicated that they were aware of problems

caused by engineering works which were designed to protect the coastline. While most respondents identified Belongil Beach and the groyne at Main Beach as being significant problems, a number of respondents believed that the extraction of the pylons from both the old and the new jetties has significantly exacerbated local erosion problems.

COMMUNITY AWARENESS AND INVOLVEMENT IN MANAGEMENT

Questions 9-13

On the issue of community awareness of how natural features (the natural environment) are managed, respondents were divided. The question generated a 100% response rate. Fortyone percent of respondents believed there was significant awareness, while 37% said 'no', 13% weren't sure and 9% didn't know.

When asked whether the local community should be involved in management issues (question 10), 64% of respondents said yes, 7% said no and 24% weren't sure. Almost every respondent who answered 'yes' believed that there should be more community consultation and education, although answers varied considerably (see Table 4.6 below).

Belongil Beach issues (questions 19-20) The question received a 73% response rate.

Respondents were asked a hypothetical question: If you were a local resident whose property adjoined the beach and your property was potentially under threat because of beach erosion on a public beach, what would you do?

A range of answers was received. They can be classified into 4 categories:

- Anything possible including beach protection, artificial reefs, groynes;
- (Sell and) move;
- Would not have been stupid or greedy enough to buy there in the first place; and
- Sue Council for allowing me to build / buy there in the first place.

Sixtytwo percent of respondents recognised Council as having the primary management responsibility for the Byron Bay area. When asked whether *Byron Shire Council has a right to prohibit land-owners from protecting their property from immediate danger due to beach erosion if it means that in the long term the beach will be degraded*, the majority of respondents said 'yes', however, a large minority said 'no' (see Table 4.5 below). Many of those who said 'Yes' were concerned about public access in the future, whilst most of those who said 'No' were critical of Council's past decision-making record.

Table 4.5 Does Council have a right to prohibit landowners from protecting their property?

Yes	No	Don't Know / Not Sure
44%	37%	18%

Table 4.6 Community Involvement in Management

Question 10: Do you think the local community should be involved in the management of Byron Bay? Some answers:

- Council shouldn't be the only decision-making body - include knowledgeable locals in the decision-making process;
- The community should be consulted on all environmental destruction and building development issues;
- The community should be informed about changes, discussions held and community input considered - not just politely accepted and then have nothing done;
- The community should be actively involved in all aspects of management;
- It's a stupid question! Of course they should be involved, who would be involved if it wasn't the community, perhaps the local community of Ballina. Involvement in every aspect of management!!;
- The community (to some extent) are involved in the council members they elect;
- Community should be consulted on all issues that impact on them either directly or indirectly. Social issues, demographic issues, development issues. It should be for our community to decide what we should have not left for the courts to decide;
- Subgroups should be formed on particular issues to research and make recommendations to Council on relevant bodies. A community development officer should be employed by council to co-ordinate the already large numbers of community based groups and provide a cohesive framework.

Kempsey Shire

Methodology

Much of the information presented in this section relies on data collected from interviews and phone conversations, attendance at meetings, newspaper articles and other publications such as letters and submissions. An examination of many of these letters and submissions has produced two categories of information: those from Government and Agencies; and those from the community, including community groups and NGOs (see Appendix 3).

In general, the submissions focused on the following common themes:

- environmental issues;
- health and related issues;
- cultural and social issues including Aboriginal heritage;
- economic viability; and
- due process.

Consultation and due process

Many of the submissions examined focus on the issue of consultation and due process. For example, the submission from Surfrider Foundation Australia stated:

Surfrider Foundation would like to express its deep concern at the manner in which the Proposal has been released without regard to due process and with apparent ignorance of and disregard for the guidelines of The North Coast Sustainable Aquaculture Strategy (August 2000). Page 167 of the Strategy notes that there is a requirement for the proponent of a sustainable aquaculture project to "consult with the local community" during the preparation of the Development Application.

At the time of writing, this process of consultation has not occurred, despite South West Rocks Aquaculture Ltd committing themselves on page 18, Section 10.5 of their own SOEE to "consultation with the community regarding the establishment of the project and the Company's proposed construction of amenities, and its beneficial impact to the community, will be undertaken prior to the start of project construction.

The Ocean Watch Australia submission stated that:

This timeframe for consultation is inadequate. Restricting consultation to merely telling the community what the proposed plans are, once they have been approved, does not subscribe with the Proponent's desire to introduce best practice. Consultation with the community involves developing a consultation program that runs for the life of the proposal. It is not something that can be simply tacked onto the end of the program.

Cultural and Social Issues including Aboriginal Heritage

The submission from the CHRRA listed a series of 'social consequences' that had arisen as a result of the proposal. Chief amongst these were concerns that:

- none of the Government Departments' submissions dealt with the social costs of the development - the cost to the community, referred to as non-monetary and non-quantifiable costs;
- throughout the assessment process there was disregard of the need for proper consultation, for example, the proponent did not initiate any public meetings in Crescent Head, South West Rocks or along the Macleay river;
- there was inadequate consultation with the local Aboriginal elders; and
- there has been a significant loss of public trust (CHRRA 2001).

Environmental Issues

Specific environmental issues were a major concern for the government agencies responsible for assessing the DA. Key concerns are listed in Table 4.7 (below).

Community Action

Over a two month period members of SORE used a variety of methods to raise the profile of the issue within their immediate community as well as petitioning Local, State and Federal Government representatives and staff (see Table 4.8 below). The techniques ranged from individuals approaching people in the street, through to a day long concert and protest event and letters to the local newspaper and State Government Ministers.

Table 4.7 Concerns raised by DUAP and Kempsey Council over the DA and SOEE.

Hatchery Site	Growout and Processing Site
<ul style="list-style-type: none">• Aboriginal Heritage• Building Details• Chemicals• Flora and Fauna• Groundwater• Impact on Wetlands (SEPP 26)• Noise• Odour• Sea Water Intake and Discharge System• Social Impacts• Soil Quality• Threatened Flora and Fauna• Traffic• Type and footprint of sea water intake system• Visual Impact and Amenity• Waste Water Treatment Facilities• Water Quality• Water Usage	<ul style="list-style-type: none">• Acid Sulfate Soil• Chemicals• Effluent Treatment and Monitoring• Flooding• Groundwater Impacts• Impact on adjoining agricultural uses• Internal Road construction• Noise• Odour• Pipeline• Pond construction• Rafferty's Drain hydrology• Socio-economic• Soil Quality• Traffic• Visual Impact• Waste Management• Water Quality• Water Usage

Source: DUAP, EPA, Kempsey Shire Council and NPWS.

Table 4.8 Techniques Used by the Crescent Head Community

<ul style="list-style-type: none">• Community leaders identified and approached to support issue• Community meetings• Concert / Open Day• Flyers• High profile individuals petitioned for support• Importing technical knowledge• Invited guest speakers• Letter to MPs, Government Agencies and newspapers• Literature review and engagement of aquaculture experts (voluntary)• Lobbying of local councillors• Local newspaper coverage• Making contact with environmental NGOs in order to raise the profile of the issue• Malibu club meetings	<ul style="list-style-type: none">• Newsletters (3)• Pamphlets / letter box drop• Petition with contact details for local and State parliamentarians and DUAP officers contact details was distributed to shops in Crescent Head and Kempsey• Phone calls / phone tree• Posters in car and shop windows• Public meetings• Questions asked in Parliament• Radio interviews with local station 2MC and the ABC• Raffle• Rate Payers Association meetings• Signs / billboards / bumper stickers.• Talking to residents and visitors to area
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4.4 Discussion

Byron Shire

The Byron Shire case study presents an examination of many of the issues facing CZM today, as well as issues specific to public participation. It is for this reason that the issue of beach erosion and protection measures at Belongil must be seen in the context of integrated coastal management for the Shire and for the Region. The importance of the natural coastal environment to the residents of Byron Shire cannot be understated. Respondents to the surveys consistently ranked the natural environment - clean air, water, climate and nature - as being of high importance to them.

The State Government has taken an interest in the Byron area and the NSW Coastal Council has made a submission to the Premier's Office regarding the establishment of a Premier's Taskforce.

In the view of the Coastal Council of NSW, the Government is confronted with a major dilemma at Byron Bay. It is a unique situation where future environmental, economic and social values are at risk as a result of threatening beach recession.... Even the "do nothing" option will potentially cost the State Government millions of dollars in compensation for lost homes, legal fees, further emergency works, or less revenue due to a loss of tourist attractiveness. (Coastal Council of NSW Resolution 1999)

In the view of the Coastal Council of NSW, the problem is beyond the capacity of Byron Shire Council to handle. *"It is a matter requiring State intervention in close consultation with the*

local council and community" (Coastal Council of NSW Resolution 1999). The Mayor, however, has been reluctant to accept any offers of 'help' from the State Government, believing that Council would lose autonomy and be railroaded by the State Government into making unwise decisions (Wilson T pers. comm. Comments made during the Coastline Management Committee meeting, 25 February 2000). This is despite the fact that BSC does not have the necessary staff or skills to complete the project internally and is in a poor financial situation which restricts Council in its ability to undertake the necessary coastal assessments, including computer modelling and monitoring to consider the future impacts of the current situation or options (J Barham pers. comm. 12 June 2001). Kay and Lester (1997) argue that the fear of losing power is one of the key factors restricting institutional reform at the local / state government level.

The Belongil area is a key tourism location within the broader Byron region and has been extensively marketed on the strength of its 'beautiful beaches' by both Local and State Government and private operators. The region was the most popular international tourist destination in Australia 1997, after Sydney. Restricted access, dangerous beaches or the complete loss of beach amenity will impact upon the region economically.

At Belongil, there is a large degree of uncertainty over issues relating to property rights and the 'duty of care' to retain public rights, including beach access and amenity. Byron Shire Council, on the one hand is being pressured by a particular group of residents, whose property is affected or will potentially be affected by coastal erosion, to construct seawalls to protect their property; and on the other hand, there is another section of the community who view the actions of the first group of residents and Council as unacceptable. The issue is complex and the responses to questions 19 and 20 in the survey reflect this. Respondents recognised the need to protect private property, sometimes at all costs, but many were apathetic to the plight of the 'monied' crowd in the Belongil area. Residents' views on the Belongil issues could not be further polarised. They can be summed up by the following two statements:

It's important that the community lets go of the idea that coastal erosion will go away, or can be prevented (Corkill, Big Scrub Environment Centre 1999).

Any solution other than rock is ... totally unsuitable and is a complete waste of money (Belongil Residents and Ratepayers Association 1999).

The survey results identify that the community is aware and concerned about beach erosion and public access to the beach in the Belongil area. They are also concerned about the type of measures being used to address the problem. A significant number of respondents (64%) believe that the community should be actively consulted and involved in the decision-making process.

In recommending the establishment of a Steering Committee to develop the Coastline Management Plan, DLWC recognised that the Committee would deal with a wide range of very complex and contentious issues about which there are diverse and strong views within the

Committee, Council and the community (after DLWC 1999). The composition of the CMC (see Table 4.2) was intended, by Council, as a means to engage key stakeholders in the development of the Coastline Management Plan as well as to ensure that the messages were delivered to the wider community via the stakeholder's networks.

This case study demonstrates quite clearly that BSC has been reliant on the use of traditional institutional arrangements and has been unwilling or unable to pursue a more adaptive approach to CZM. This has hindered Council's ability to deal with complex natural and social environment policy issues (after Ferguson 1996). With respect to the Belongil issue, the polarised viewpoints within the community and on the Stakeholder Committee have significantly delayed the development of the Coastline Management Plan, yet there has been no attempt by Council to employ an adaptive management process which incorporates concepts such as facilitation or mediation, in order to deal with this particular issue outside of the CMC.

Kempsey Shire

The Kempsey Shire case study describes the evolution and process of action of a community action group in response to a particular development. The study presents an example of where the legislative and planning framework worked as it was designed. A poor development was prevented from progressing. The DA and SOEE were of a particularly poor standard and that based on this incomplete information, the respective government agencies advised the Proponent to withdraw the DA. There are, however, broader issues for consideration. It is unclear whether the high level of community activity in fighting against the proposal actually had any bearing on the withdrawal of the Application. For many in the community, the Proponent's decision to withdraw the DA was the final result, however, there are a number of other issues that bear closer examination.

With respect to the quality of the DA, the NPWS, in a letter to DUAP commented on 'erroneous or misleading information contained in the SWR Report' and detailed several areas which needed comprehensive review (see Table 4.9 below).

Table 4.9 NPWS - Comments on the SOEE.

Hatchery – Contrary to the statement in the SOEE, the subject site and ancillary facilities are located adjacent to SEPP 26 – identified rainforest remnants and/or within the designated buffer distance of 100m. The letter details 11 separate errors within the SEE.

The NPWS 1974 and the Threatened Species Conservation Act 1995 override SEPP 62 – Sustainable Aquaculture. Flora, fauna and archaeological information / surveys requested by the NPWS should have been provided in the SEE. Searches of the Atlas of NSW Wildlife and Aboriginal Sites Register alone are not adequate. The NPWS referred to the “paucity of natural and cultural heritage information supplied in the SOEE.”

Source: NPWS, 26 April 2001

From the process, two issues worthy of discussion emerge. Firstly, the DA was inherently flawed, so it raises the question of why it ever made it to the public exhibition stage. The second point is that the assessment process demonstrates that the current planning system is not designed to capture a range of 'social' and 'process' data which are often critical to making effective resource management decisions (see Table 4.10 below), especially at the local government level.

These issues were only cursorily raised by the Agencies in their responses to the SOEE and it seems that it was only due to a concerted effort by the community that these issues were considered in more detail. Community dissatisfaction with the 'decide', 'announce' and 'defend' (DAD) mentality can be summarised by one of the community submissions which states that:

It is unfortunate that much of the real leg work in flushing out poor development vision and implementation is left up to concerned citizens rather than our elected government members and their supporting officers (Coast Arc P/L 2001).

Table 4.10 'Social' issues not accounted for in the DA process

- The level of environmental awareness in a community.
- The degree to which the public participates in decision-making.
- People's perceived changes in quality of life, standard of living or access to resources can be taken into account.
- Financial, social and ecological wealth.
- Effects on individuals and the community as a whole.
- The effect that a policy or development may have on future generations.

A central component of the process is that the local community is now 'vigilant', aware that 'their' piece of the NSW coast is under threat. Their effort, quite possibly was unwarranted and could have been avoided if they had been involved earlier on in the process. Crescent Head, however, like many other villages in coastal NSW is under pressure from population growth,

migration and development, so it is really only a matter of time before this type of event would have occurred anyway.

One of the key outcomes of the process is that the community has started to lobby Council for the development of a Coastal Management Plan for the region. Council is aware of the value of securing informed local support - this is a by-product of the distrust of the process of government. This will hopefully provide the community with an opportunity to play a role in the design, development and management of the region's coastal environment.

4.5 Conclusion

The case studies highlight a number of salient points about the practice of CZM in NSW. In Chapter 1, I identified a number of key issues for CZM. These are population growth; environment and sustainability; management and decision-making; public participation; and access. It makes sense to discuss the two case studies in the light of these key issues in concert with some of the common issues hindering CZM in NSW (see Table 1.4).

NSW is experiencing rapid population growth and migration to the coastal zone. With respect to specific population growth issues, there is only a small amount of information to be gained from the studies. In Byron Shire, the fact that there is a clash between the broader community and wealthier residents is a reflection of the intrastate migration from urban to rural coastal areas. This influx of wealthy residents has served to drive up the price of real estate in many coastal areas and may force a reverse migration - one in which long-term small town inhabitants may be forced to move inland because they cannot afford to live in coastal areas which are rapidly growing in population.

The issue of environment and sustainability is a major factor in both case studies. In the Kempsey Shire study, all of the government agencies had significant environmental concerns with the proposal. Acid sulfate soil, water quality, damage to SEPP 26 wetlands and potential impact on existing flora and fauna were some of the key issues (see Table 4.7). On a broader level, the proposal raised the concerns of Agencies, Council and the Community because it had potentially negative social impacts and impacts on Aboriginal heritage. The Byron Shire study brings out a number of interesting sustainability issues. There was significant disagreement between Council and various sections of the community because of differing opinions as to what was sustainable for the area. The question of ESD was raised a number of times and the evidence from the case study highlights that the criteria for ESD are open to widely different interpretations - which does not encourage integrated coastal management. Over the last 5 years, this has resulted in a number of cases where private landholders have taken BSC to the Land and Environment Court.

One of the central issues identified in the NSW Government Legislative Council review of coastal management in NSW (1991) was that Councils were often ill-equipped to deal with complex coastal management problems, and solutions tended to be of a short-term nature because local government lacked the resources or expertise to implement longer-term solutions. This issue has been a major stumbling block for Byron Shire and the case study picks up on a number of key issues. In this regard, the study emphasises the key points made at the end of Chapter 3, as well as displaying many of the common problems faced in CZM today, including years of Council negligence over illegal DA's in the Belongil area. The key emphases from this study are the need for:

- better planned policies and programs for Byron Shire Council;
- increased monitoring and evaluation of PPS; and
- better training for coastal managers.

In terms of legislation and policy, the Kempsey Shire study highlights the lack of opportunity for community consultation in the policy or plan development stage. Conacher and Conacher (2000) and Farrier *et al* (1999) argue that the major opportunity for community participation in the environmental planning framework in NSW is at the start of the process, yet in the Kempsey Shire study, the only opportunities for community involvement came very late in the process. In this case, the Proponent failed to consult the local community in any meaningful way with respect to developing in an 'icon' area. In a very short period of time, the community acted quickly, using multiple communication methods and participation techniques to get their message across to the decision-makers (DUAP), the broader community and politicians (see Table 4.8).

Access to the coast is an important issue in the Byron Shire study. The construction of rockwalls at the Belongil has the potential to strip the beach completely of sand and access along Belongil beach is generally not available at high tide. There have been a number of cases where residents along Belongil Spit were reported to have placed signs up on public property in order to prevent public access to beaches in the area. Council has also been taken to court because it acted to protect the greater public's right of access to the beach area by arguing that the emplacement of rockwalls was likely to prevent public access to the beach. In Kempsey Shire, there were a number of concerns with regard to public safety due to the proposed location of intake and outlet pipes for the prawn hatchery.

Both the Case Studies highlight many of the issues about public participation that have been raised in the preceding chapters. Public participation programs are relatively widely established, but often in an *ad hoc* manner and the success of programs in NSW is not governed by any overarching framework for the development and implementation programs for CZM. Rather, as the case studies demonstrate there is a vague and often unprofessional approach to the practice of community consultation and public participation which often serves to impede the practice of CZM. In the studies, I found there were many factors that restricted

the community's/publics ability to participate in CZM. Some of these obstacles are because of bad planning laws and regulations, whilst others are a reflection of the lack of knowledge on the part of proponents (Council or/and Developers). Table 4.11 (below) provides a summary of these issues. It needs to be recognised that the community/public is by no means a singular entity (a fact often lost on Decision-Makers and Developers). The consultation process can often serve to restrict the progress of plans - as in the Byron Shire Coastline Management Plan - if the lead Agency or Proponent limits itself to methods of consultation or participation that do not serve to break down traditional institutional stereotypes.

The result of the discussion from these case studies demonstrate that public participation and community consultation is not practiced knowledgeably or well in NSW. Systems must be established that recognise the value of community input and communities must be involved early, meaningfully and continuously throughout the decision-making process. Whoever undertakes the consultation process (Councils, Agencies or Developers) needs to engage the public fully and effectively.

The next Chapter will describe a model that allows practitioners - whether they are Councils, Agencies, Developers or Community Groups - to develop public participation programs according to their specific needs; and presents a series of criteria that enable social indicators to be monitored and evaluated, thereby allowing them to become a measurable component of environmental monitoring and thus be included in environmental reporting and the decision-making process.

Table 4.11 Factors Effecting Community Participation in the Case Studies

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| <ul style="list-style-type: none"> • Too much information delivered too quickly. The time frame for public / community to be able to respond to Agency or Proponent consultation requirements prohibits fast tracking of proposals or plans. • Often consultation occurs at an intensive level without first conducting education or awareness issues. In this respect, consultation only serves to deliver pre-existent ideas and opinions because there has been little or no attempt to make the public / community aware of the bigger picture. • The consultation process is often little more than a public relations exercise for an Agency or Developer. Public fears are generally not allayed. • A lack of initiative on the part of Agencies or Proponents reduces the debate to one of self-interest on the part of the community. • Public participation and community consultation strategies can serve to ostracise certain members of the community; create disharmony; create burnout amongst community 'champions'; and cause disruptions to family life or / and job satisfaction. |
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