



Institutional arrangements, incentives & governance

Unlocking the barriers to successful coastal policy-making



Institutional arrangements, incentives and governance – Unlocking the barriers to successful coastal policy making

Garry Middle

QNRME04079

ISBN 0 9578678 7 5

© Cooperative Research Centre for Coastal Zone Estuary & Waterway Management

Published by the Cooperative Research Centre for Coastal Zone Estuary
and Waterway Management (Coastal CRC)

Indooroopilly Sciences Centre

80 Meiers Road

Indooroopilly Qld 4068

Australia

www.coastal.crc.org.au

This text may be copied and distributed for research and educational purposes with proper acknowledgement.

Disclaimer: While the work was prepared with care by its contributors, the Coastal CRC and its partner organisations accept no liability for any matters arising from the contents.

Institutional arrangements, incentives and governance – Unlocking the barriers to successful coastal policy making

A theme report from the Coast to Coast 2002 National Conference, Gold Coast, November 2002

Garry Middle
Curtin University of Technology
Urban and Regional Planning

Contributors:

Judy Lambert¹, Mary Howard², Ann Peterson³, Fay Brennan⁴, Dave McPherson⁵, Neil Lazarow⁶,
Roger Shaw⁷, Lisa Intemann⁸,

1. Councillor, Manly Council;
2. Hawkesbury Nepean catchment management forum;
3. University of Queensland, Geographical Sciences and Planning;
4. Councillor, Wyong Shire Council;
5. NSW Department of Infrastructure, Planning and Natural Resources;
6. CRC for Coastal Zone, Estuary and Waterway Management & Australian School of Environmental Studies, Griffith University;
7. CRC for Coastal Zone, Estuary and Waterway Management;
8. Councillor, Hastings Council

Executive Summary

The key question for this paper is “how do we provide better governance for our coastal zone?” The focus of the paper is on the *process* of policy making, rather than the *contents* of policy (policy measures). There are significant barriers to good coastal policy making, and the purpose of this paper is to identify those key barriers and to recommend how they could be overcome.

This paper uses as its primary source of information the deliberations of the Coast to Coast 2002 Conference held at Tweed Heads in November 2002, notably, the papers presented at the conference and resultant discussions at the workshops. Additional information and views were added by a group of interested conference delegates who provided comment on the various drafts of this paper in the months following the conference.

Section 2 discusses the key barriers to good coastal policy making and how those barriers could be overcome. Section 3 highlights the three most significant barriers to good governance and recommends what actions should be taken to overcome those barriers.

This paper identifies thirteen barriers to good policy making, being:

- Lack of integration;
- Inappropriate policy scope;
- Inadequate or inappropriate public participation and involvement;
- Lack of resources for both policy making and implementation;
- Information base is either inadequate or drawn from a narrow range of sources;
- Lack of appropriate capacity and skills;
- Lack of political and community support;
- Institutional and leadership inertia;
- Lack of adequate monitoring of policy implementation and policy review;
- A shift in emphasis by key agencies from local to regional scale;
- Unreasonable demands by funding agencies;
- Lack of trust in the key decision-making agencies; and
- Some of the key agencies are perceived to have conflicting roles as both a regulator and a facilitator of policy making.

Three key conclusions are drawn from the discussion of these barriers. Firstly, these barriers cannot be seen in isolation and that in addressing one barrier other barriers are also addressed. Secondly, if policy making adopts two key approaches then many of these barriers could be addressed and successful policy making would result. These approaches are:

- on-going learning should be a key element of modern policy making, and
- successful policy outcomes are more likely where strong personal leadership emerges through a policy “champion”.

Policy making is more likely to be successful if learning takes place. This is particularly true where there is considerable uncertainty about the science associated with an issue and delaying formulating a policy response is not an option given the urgency of the problem at hand. Adaptive Management (AM) and Action Research (AR) have emerged as ways of dealing with on-going policy learning.

Policy champions network with the key agencies to ensure integration. Through their guidance and understanding of the issues and politics, they ensure the policy scope is appropriate. They provide a focal point for community education and encourage participation by all key stakeholders. Champions can argue and lobby for more resources and ensure that all sources of knowledge are made available. Finally, they can enlist the support of politicians and the community as a whole.

The three most significant barriers to good coastal policy making are considered to be:

- Lack of integration between and across governments;
- Inadequate and inappropriate public consultation; and
- The lack of resources and the inefficient application of existing resources.

Three key recommendations to minimise these barriers are:

Recommendation 1

Governments recognise that the lack of integration in the way the coast is managed leads to significant inefficiencies and less than optimal management. Efforts to restructure natural resource management with a focus at the regional and local levels should continue and there should be an increased emphasis on enhancing policy integration between levels of government and among agencies responsible for achieving improved coastal outcomes.

Recommendation 2

Policy makers develop appropriate public participation procedures including representative steering groups with defined decision-making roles and responsibilities that recognise the site-specific local conditions and have representation from the key stakeholders including affected local communities and government agencies. Adequate resources, including time, needs to be given to public participation.

Recommendation 3

Governments recognise that the current level of funding for coastal policy development and its implementation does not meet the community's expectations and is causing ineffective management of the coastal zone in many cases. All three levels of government need to work together to ensure that existing resources are used effectively and that additional resources be made available to meet the expectations of the community.

1 Introduction and background

1.1 Scope

The key question for this paper is “how do we provide better governance for our coastal zone?” In a general sense, “governance” of the coast refers to the full range of laws, policies, plans and legal precedents that can either prescribe how the coast is used or constrain its use (Hill and Lynn Jr, 2004). This paper will look at the policy end of governance and as a result, the term “policy making” will be used instead of the more general term “governance”.

There is a clear focus in this paper on the *process* of policy making, rather than the *contents* of policy (policy measures).

To clarify, in this paper policy includes:

- State and regional formal policies;
- Strategic coastal planning; and
- Management plans for key areas.

1.2 Purpose and objectives

Coastal policy making in Australia is the primary responsibility of State and Local Governments. There has been considerable action in recent times by governments at all three levels to address coastal issues since the Resource Assessment Commission in 1993 found that

A concerted national effort is essential if the management of Australia’s coastal zone resources is to improve and if Australians are to continue to enjoy the economic, social and environmental benefits provided by the coastal zone (Resource Assessment Commission 1993: p362)

State governments have attempted to consolidate and update coastal legislation and develop state-wide coastal policies and strategies. The Commonwealth Government has developed a National Oceans policy and made funds available through Natural Heritage Trust (NHT) to fund community based coastal projects. Local Governments continue to allocate their limited resources to managing the coast.

But, despite these efforts criticism of our coastal policy making remains strong. As Graham’s (2002) review of progress made since the 1993 Resource Assessment Commission report notes:

What has not changed in the face of all these pressures is the underlying approach to governance ... Despite the fact that there have been significant improvements in the management of coastal land in recent years, it does not equal sustainable development of our coastline (p123)

Clearly, there are significant barriers to good coastal policy making, and the purpose of this paper is to identify those key barriers and to recommend how they could be overcome. To that end, the following three objectives are set:

1. Identify the barriers to good policy making for our coast;
2. Recommend how those barriers can be overcome; and
3. Identify the three key barriers to coastal policy making and recommend what specific actions should be taken by the key stakeholders to address these barriers.

1.3 Methodology

This paper uses as its primary source of information the deliberations of the Coast to Coast 2002 Conference held at Tweed Heads in November 2002, notably, the papers presented at the conference and resultant discussions at the workshops. Additional information and views were added by a group of interested conference delegates who provided comment on the various drafts of this paper in the months following the conference.

1.4 Paper format

Section 2 discusses the key barriers to good coastal policy making and how those barriers could be overcome. Section 3 highlights the three most significant barriers to good governance and recommends what actions should be taken to overcome those barriers.

2 The conceptual understanding of good governance of our coasts

2.1 Overview

This paper identifies thirteen barriers to good policy making, being:

- Lack of integration;
- Inappropriate policy scope;
- Inadequate or inappropriate public participation and involvement;
- Lack of resources for both policy making and implementation;
- Information base is either inadequate or drawn from a narrow range of sources;
- Lack of appropriate capacity skills;
- Lack of political and community support;
- Institutional and leadership inertia;
- Lack of adequate monitoring of policy implementation and policy review;
- A shift in emphasis by key agencies from local to regional.
- Unreasonable demands by funding agencies;
- Lack of trust in the key decision-making agencies; and
- Some of the key agencies are perceived to have conflicting roles as both a regulator and a facilitator of policy making.

The discussion below gives an overview of those barriers followed by a discussion of how those barriers may be overcome based on the experience of people working in the field and examples given at the Coast to Coast 2002 Conference. The discussion ends with some conclusions and key recommendations about actions to deal with those barriers.

2.2 Lack of integration

2.2.1 Description

Lack of integration is a problem at a variety of levels. Firstly, there is the lack of integration between the various levels of government, Commonwealth, State and Local, dealing with coastal policy (vertically). Then there is the problem of integrating the policies of agencies responsible for the various aspects of coastal policy within one level of Government, for example State government (horizontally). Finally, there is the lack of integration within agencies dealing with coastal policy (internal) where different sections dealing with different aspects of coastal policy fail to communicate with each other.

Integration is also needed beyond governments and agencies dealing with coastal policy. As Dovers (2002) notes, integration is also needed:

- spatially – for example linking of marine and terrestrial environments within a consistent policy framework;
- temporally – integrating the short and long-term impacts of human activity into policy;
- knowledge – integrating the various sources of knowledge into policy, whether scientific, local, social or economic; and
- social – integrating policies into the broader community through better participation techniques.

These broader integration themes are picked up in other barriers, but their inclusion here illustrates the point that many of these barriers cannot be seen in isolation from the other barriers.

Lack of integration can lead to significant problems, including:

- ineffective policy making where agency 'turf wars' impede good decision-making;
- inefficient use of resources as agencies duplicate the work of other agencies; and
- different agencies working to different, and at times, conflicting timeframes making coordination of decision-making difficult.

In addition to the problem of agency integration there is the problem of political integration, where the lifetime of a particular policy is usually longer than the political cycle. This can be a particular problem when Governments change and bring with them different priorities that may conflict with the existing policy framework.

2.2.2 Overcoming the barrier

Policy Champion

Integration is more likely when there is a 'champion' who is driving the policy process. These people act as a motivating influence for all stakeholders, building trust among all the key players, which in turn acts to break down any inter-agency turf wars as they use their significant interpersonal skills to win people over to the common cause.

Early involvement of all relevant agencies

Integration is also helped if at the beginning of the policy process all the key agencies are invited to take part. Once at the policy table, agency's roles and responsibilities should be clearly laid out and any potential for conflict, overlap and lack of integration identified prior to the policy making process.

Formal partnerships

The establishment of formal partnerships between the key agencies, using Memoranda of Understanding (MOUs) as the basis of spelling out responsibilities and resource commitments, is a useful tool in ensuring integration between the relevant agencies and levels of government.

Independent policy making body

Another solution is to allow an NGO (non government organisation) or an independent body set up specifically for the policy making to be the key coordinating and/or decision-making body. This approach helps in trust building, as the body is seen as having no particular vested interest and is separated from the political process. This independence allows for better mediation of any conflict and helps build support from all sides of politics. This approach should also ensure that any policy changes that are required, when an election brings about a change of government, are minimal, causing little if any disruption.

Removing one level of government

Another solution to overcoming the problem of vertical integration is to remove at least one level of Government. Removal of the State Government level and an expansion of Local Governments to be based on natural (catchment) boundaries is one option. This type of reform, if achieved, is a longer term solution.

2.3 Inappropriate policy scope

2.3.1 Description

The scope of a policy can be considered inappropriate when it is either too narrow or mis-directed in its focus.

Policy scope can be too *narrow* in two ways: the geographic extent (i.e. a policy focuses on an area defined by some administrative boundary rather than a whole catchment); and, extent of issues covered (i.e. covering only environmental concerns and failing to integrate social and economic concerns as well).

In some cases, the policy scope can be *mis-directed* in the way it defines the problem at the heart of the policy or in the list of relevant issues to be covered by the policy. This usually happens when the policy making agency defines the scope of the policy prior to involving the public or other key stakeholders. This approach is unlikely to achieve agreement among the stakeholders on key components of the policy, such as aims and objectives. Occasionally, the policy scope can end up too wide and cover areas that are not within the statutory jurisdiction of the agencies involved and the available legislation. Clarke (1992) also discusses issues of the mis-timing of policy.

When the policy scope is either too narrow or mis-directed the resultant policy will simply miss the point and most likely fail to work.

2.3.2 Overcoming the barrier

The solution to this problem of inappropriate policy scope relates to inadequate consultation at the policy problem definition phase, which partly stems from a lack of willingness of some lead agencies to seek advice at this stage of policy making. Some agencies see the scoping phase of policy making as a bureaucratic and technical process and not a political one. This inertia of these agencies to change is dealt with in more detail below.

2.4 Inadequate or inappropriate public participation and involvement

2.4.1 Description

Public participation is *inadequate* if not enough time and effort is spent in consultation, the range of stakeholders involved is too narrow (i.e. some stakeholders are not consulted), and the scope of consultation too narrow (for example the community is not involved in defining the scope of the policy as discussed in the previous section).

Public participation is *inappropriate* when the public is merely consulted and not made a part of the decision-making process. Communities and stakeholders are expecting to have a greater say in decision-making and if not accommodated, the credibility of the policy and the process will be reduced – it will lack a public mandate. Further, inadequate and inappropriate participation will lead to a poorer policy outcome by not including all available information and will likely leave unresolved any outstanding disagreements amongst stakeholders, which in turn will lead to reduced public support for the final policy.

Another concern here is the ability for the community to understand the key issues and to become involved in the process. This is about the *capacity* of the community to be involved in the policy making process. This is a significant issue for many communities.

Public participation is a critical factor in the policy making process because if done properly it provides political legitimacy to the policy. A policy that does not have the agreement of the key stakeholders, in particular the community, will ultimately fail.

2.4.2 Overcoming the barrier

Much has been said and written about this issue, and the message is consistent: good consultation is more likely to lead to good policy and good implementation.

The first step is to establish a representative steering group to guide and to make decisions on the process and policy. Inclusion of stakeholders is important, although this could lead to a large group making meetings difficult to manage. The Chairs of the groups need good meeting process skills and must be seen as independent of the key vested interests. Government representation can be a difficult issue. It is important to be as inclusive as possible to facilitate integration, but the number of government representatives should not be so large as to be seen to be outweighing the collective community voice. It is important that the purposes and powers of this group are set out clearly at the outset including the nature and extent of any decision-making powers.

The time taken for the consultative process needs to be, and to be seen to be, adequate, especially to ensure that the volunteer stakeholders have enough time to provide considered input. The time needed is usually longer than what most government agencies see as being needed, and so patience is required.

How information is presented and communicated is also a significant issue. Scientific knowledge needs to be de-mystified and presented in a manner that all stakeholders can understand.

No single formula for public participation will work in all cases: rather, the process needs to reflect local conditions and attitudes. Traditional methods like public meetings and press releases are becoming less relevant, with local communities wanting more flexible methods of finding out about the issues and providing input. Having a presence at community events (e.g. a stall at a local Show Day) has worked well in some areas.

There is considerable merit in approaching each stakeholder group independently and offering to organise a special one-on-one meeting between the policy making group and the stakeholder group. This is a good way to build trust and to access local knowledge.

In many cases, the section of coast which is the subject of policy making is isolated and well away from the where the key agencies have offices or officers on the ground. In these instances, the employment of a fulltime community liaison officer to work in the region is essential, especially during the public consultation period. It may also be useful to set up an office in a central area during the review period.

Improving public participation will add time to the policy making process and in many cases require additional resources, which is the subject of the next barrier.

2.5 Lack of resources for both policy making and implementation

2.5.1 Description

Lack of resources at the policy making phase affects the way public participation is carried out (Section 2.4) and the ability to collect adequate information upon which decisions are made. As stated earlier, this will result in a less than adequate policy response to the issues at hand. Lack of resources at the implementation stage will mean that managers will have to choose which policy measures are to be implemented and which to leave to a later time. This selective response will not only undermine the effectiveness of the policy but also undermine the public confidence in the policy and the agencies responsible.

Sometimes agencies deal with lack of resources by cost shedding. This can be particularly true where State and Local Governments are working in partnership. State governments give up the responsibility for an area of management but do not provide the Local Government of the local

community with the extra resources needed to pick up that management. This approach not only leads to poorer management, it also builds mistrust of the State Government and its agencies.

2.5.2 Overcoming the barrier

The issue of a lack of resources is not new and has been a growing problem in Australia since the mid 1980s when successive Commonwealth and State governments have sought to rationalise their involvement in, and resources spent on, welfare issues, including natural resource management.

To some extent, this issue can be addressed through the policy making process where one of the aims should be to better use and coordinate existing resources, including volunteers. Ultimately, however, resources will only be increased through community pressure and political support.

2.6 Information base is either inadequate or drawn from a narrow range of sources

2.6.1 Description

There are two aspects to this barrier. Firstly, in many cases, the information base available to policy makers is inadequate simply due to the lack of data, an inability to gain access to all relevant information (i.e. agencies not sharing data or the data are in a format that makes sharing difficult) or due to the uncertainty inherent in the data. The urgency of the problem means that delaying action is not an option. In some cases, agencies fail to acknowledge these shortcomings and proceed to draw up policies as if the data is adequate and uncertainty is low. The danger in failing to acknowledge this inadequacy and uncertainty is that policy measures will lack the flexibility to deal with uncertainty and it will be difficult to adjust policy responses when new data become available. In these cases policy makers should acknowledge the shortcomings of the data and adopt appropriate flexible policy responses.

The second aspect is that policy makers may use knowledge bases that have a narrow focus, relying on their own resources and ignoring less traditional environmental knowledge bases. The local knowledge of the affected communities is often not given the same status as 'expert' knowledge. This will not only lead to a poorer policy outcome, it also builds mistrust in the affected communities. The knowledge of traditional owners is particularly significant in this regard.

Knowledge from the social and economic fields often needs to be considered as well, particularly where cultural values are at stake or where certain sections of a community have a particular economic interest in the resource.

Adding to this problem of inadequate information is the lack of data integration from different sources where data are collected and held by different agencies in a variety of formats making it difficult and costly to integrate and share that information.

2.6.2 Overcoming the barrier

As noted earlier, modern policy making is set within a climate of increasing complexity and uncertainty, and traditional (scientific and technical) sources of knowledge are no longer adequate in describing the nature of the problem and framing solutions. Local and Indigenous knowledge is becoming more important as an input into policy making. Further, growing calls to set coastal policy within a broader sustainability framework requires that environmental knowledge needs to integrate with social and economic knowledge.

Ensuring that all relevant knowledge sources – traditional scientific, local, Indigenous, social and economic – are considered as part of policy making is a matter of commitment by the policy makers and of process design. Getting the policy makers to make that commitment and to design

the process to accommodate other sources of information can only happen through pressure from those stakeholders to have their knowledge heard. It is one of the key approaches that needs to be defined and agreed at the start of the process.

The key factors of ensuring that alternative forms of information are on the policy table and are seen as being of equal status to scientific knowledge are:

- ensuring the makeup of the steering group includes all relevant stakeholders;
- continued pressure from those groups to have their knowledge recognised; and
- including the broader sustainability issues as part of the aims and objectives of the policy.

2.7 Lack of appropriate capacity skills

2.7.1 Description

Successful policy making and implementation relies on the capacity and skill of those involved. The most common area of concern relates to those responsible for policy implementation and their lack of the necessary training and skills. Whilst some effort has been made to improve the technical skills of managers, insufficient effort has gone into training managers in how to deal with the various stakeholder groups and into areas like conflict resolution and negotiation skills.

The capacity of those involved in the decision-making is also a concern. All stakeholders do not have equal capacity to be involved even though they have equal interests in the outcomes. Community groups and some user groups have less capacity to be involved in the policy making either due to lack of time, knowledge or resources.

2.7.2 Overcoming the barrier

Some key stakeholder groups are particularly disadvantaged in terms of their involvement in the decision-making because they lack the training and understanding to deal with some of the issues and they may not have the time or resources to attend meetings. In these cases, resources need to be made available to improve the knowledge of these groups and to enable them to attend meetings. Unless governments provide funds to these groups their interests will be under-represented, the policy outcome less than optimal and broad community support and trust of the policy and the process is unlikely to follow. Simple solutions include:

- scheduling meetings after work hours to allow volunteer members to attend meetings;
- providing traveling allowances for all members; and
- choosing meeting places that suit local volunteer members so that the professional members bear the travel costs.

The final policy should include provisions for training for managers who are responsible for implementing the policy to ensure that they are kept up-to-date with the latest developments in coastal management. Further, this training should also cover the social side of management – i.e. interpersonal, negotiation and communication skills.

The steering group should ensure that they too have training, particularly if the group has an on-going implementation role.

2.8 Lack of political and community support

2.8.1 Description

Policies will often fail or fail to get implemented if there is inadequate support from politicians from all the levels of government. Resources will not be made available, and the government agencies

will not commit to addressing the issue unless the politicians see the issue as being important. In many ways, the level of resources made available is a measure of political support. This issue is closely tied with a lack of community support for, and understanding of, the problem. Politicians will see an issue as important if their constituencies see it that way. This, more than anything, reflects the social nature of many environmental problems. Environmental change only becomes an issue when people see it as a problem. An issue will only be addressed if enough people see it as a problem and actively work to have resources allocated to solving it.

One key area of the community where support is not always forthcoming is industries that use or affect the coast – fishing, tourism, development and farming. These industries often have significant political influence and directly or indirectly have a profound influence on any policy success and its implementation.

2.8.2 Overcoming the barrier

Political support will be gained if the community sees the issue as being important. There is simply no substitute for community education and all the usual political actions: rallies, petitions, etc. There is a growing network of action groups using a variety of methods to garner community and political support. Many of these groups have websites, which are a rich source of information on methods used to gain support for their issue.

The public participation process is the most significant tool in raising community support for a policy. In cases where community support is lacking, the participation process should include an educative element. Communication of the key science in support of the policy is crucial, and needs to be done in a way that allows the ordinary citizen to understand the science without losing meaning.

2.9 Institutional and leadership inertia

2.9.1 Description

This barrier relates in part to the inability of some key agencies to either adapt to changing circumstances in coastal management or to adapt quickly enough. In this policy context, it relates to cases where a policy requires particular agencies to change certain aspects of its operations but the agency fails to respond adequately. This inertia to change can be due to inadequate staff training or unwillingness for key individuals or the agency as a whole to endorse those changes. Sometimes the cause of the inertia is the structure of the agency in that the appropriate policy response may not fit comfortably within the existing structure and there is no incentive to change the structure to meet the new challenges.

Inertia can also occur within the leadership of coastal planning and management. This can be from politicians, Local State and Commonwealth, or from key individuals who are active in coastal management – community leaders, academics and researchers. These leaders play a key role in community education, and if there is a reluctance for these people to adapt to the changing pressures on the coast then it is unlikely that the broader community will also adapt.

2.9.2 Overcoming the barrier

Institutional inertia can only be overcome through internal reforms within the agency driven by both political and community pressure, or through the imposition of institutional change externally by the political process. External change most often occurs when a new Government takes charge following an election.

Inertia is best dealt with by preventative measures: that is, putting in place processes that work against inertia forming in the first place. This is best achieved by the agency and the leadership being committed to policy learning at the outset. This process of policy learning is facilitated by having adequate monitoring of policy implementation (refer to the next section).

2.10 Lack of adequate monitoring of policy implementation

2.10.1 Description

A barrier that has recently emerged is the lack of adequate monitoring of policy implementation. This relates to both ensuring that actions are being carried out and measuring actual policy outcomes or impacts. It is often a political reality that it is more important to have a policy than to know if it's being implemented or is actually working. This last issue is particularly important: adequate resources may be provided to implement a policy but the actual impacts of that implementation may not be known. It may be, that despite having a good policy making process and producing a policy that has universal support, it may still be a bad policy. Without measuring the changes that result from policy implementation, there will be no way of knowing that the policy is having the desired environmental, social and economic outcomes.

2.10.2 Overcoming the barrier

The two aspects of this issue require separate attention. Monitoring actual policy outcomes or impacts relates to policy design: policies should include measures that ensure environmental monitoring occurs during implementation, and that resources are made available to carry out the monitoring.

The other aspect is more about auditing and ensuring that the policy is being implemented as agreed to. To be credible, auditing needs to be done independent of the policy makers. Currently, within the coastal policy community there is little work being carried out and little capacity for this type of work. This is a serious short coming and unless addressed will ultimately undermine the public confidence in the policy work being carried out in the coastal zone.

2.11 A shift in emphasis by key agencies from local to regional scale

2.11.1 Description

There is growing concern about the shift in emphasis by key agencies from local to regional scale. Whilst the change of focus is seen as positive in that the management problems are now being defined using natural boundaries, for example catchments, there is concern that the need to fund projects at the local, sub-regional level will be ignored. It is easier to get community understanding of, and involvement in local, rather than regional issues because that is what people have to deal with day to day.

Catchments are not the only way to define natural boundaries, and using catchment boundaries may not be the most appropriate way to manage the coast.

2.11.2 Overcoming the barrier

This problem is emerging as NHT mark II evolves and funding for coastal projects gets caught up in this regional catchment management approach. The extent of the resulting issue is yet to be determined and it is recommended that coastal communities and researchers monitor closely how NHT mark II unfolds over the coming months.

2.12 Unreasonable demands by funding agencies

2.12.1 Description

Where policy development and implementation is relying on funding from a government agency (for example NHT funds), that agency can set up a reporting process that is placing unreasonable demands on the group responsible for using the funds. Valuable time is spent on these reporting tasks rather than getting on with producing a policy or doing on the ground work.

2.12.2 Overcoming the barrier

Again, the extent of this problem is yet to be determined and it is recommended that coastal

communities and researchers monitor closely how NHT mark II unfolds over the coming months.

2.13 Lack of trust in the key decision-making agencies

2.13.1 Description

In some cases the agency responsible for the policy making or implementation has a history of poor performance, either perceived or real. In these cases there is already a lack of trust by the community in an agency, which makes any new policy making a difficult task.

2.13.2 Overcoming the barrier

In most cases, this mistrust has developed either due to the inherent inertia in the agency, or a lack of consultation with the key stakeholder groups and communities. These matters are covered adequately above and relate to reforms within the agency and the need to develop a learning culture within that agency.

2.14 Key agencies are perceived to have conflicting roles

2.14.1 Description

Some of the key policy making agencies have a real or perceived conflict of interest, which will not help in building trust with the community. This is particularly true where the agency responsible for making the policy also has a role in facilitating or promoting development. For example in some states, Local Governments are responsible for drawing up coastal policies and management plans but also have a role in promoting coastal developments.

2.14.2 Overcoming the barrier

Overcoming the problem of conflicting roles can be difficult, particularly in cases where Local Governments are both the decision maker and a proponent (e.g. provision of infrastructure in coastal reserves).

One way to overcome this barrier is to minimise the perception of conflict of interest by establishing a credible coastal advisory group to provide independent advice to the local government on coastal matters.

2.15 Conclusions

2.15.1 Overview

The discussion above clearly shows that these barriers cannot be seen in isolation and that in addressing one barrier, other barriers are also addressed. For example, by allowing for a greater level of public participation in the decision-making by setting up a representative steering group, the policy making process is open to other non-traditional sources of knowledge, like local knowledge.

Another key conclusion is that if policy making adopts two key approaches then many of these barriers could be addressed and successful policy making more likely. These approaches are:

- on-going learning should be a key element of modern policy making; and
- successful policy outcomes are more likely where strong personal leadership emerges through a policy "champion".

2.15.2 Policy learning

A common theme that cuts across most of the specific barriers mentioned above is that policy making is more likely to be successful if ongoing learning takes place. This means that the need for policy learning needs to be both acknowledged by the policy makers and built in to appropriate aspects of policy making. This is particularly true where there is considerable uncertainty about the

science associated with an issue and delaying formulating a policy response is not an option given the urgency of the problem at hand.

Adaptive Management (AM) and Action Research (AR) have emerged as ways of dealing with the on-going policy learning. There are some differences in emphasis with AM focusing on outcomes and AR focusing on the process of policy making and implementation, but they both involve setting up flexible policy measures, carrying out monitoring of policy responses in the affected environment and having a direct feedback from the results of the monitoring into policy responses. Fundamentally, however, it requires that policy makers acknowledge that uncertainty exists and needs to be planned for. This is not always easy.

The key point is that by setting up policy making so that it involves on-going learning, many of the barriers listed above can be addressed. Integration is improved, the policy scope continually refined, appropriate public participation and communication strategies are developed and implemented, the information base is built up, capacity enhanced, and so on.

2.15.3 Policy Champions

Many of these barriers can be overcome through the efforts of a policy champion: this is usually a high profile leader for the issue who acts as a focal point for much of the policy work. These people usually have a leadership role in policy making and/or implementation (i.e. Chair of the steering group) and have or readily garner the trust of all stakeholders by being seen as independent but having a passion for the issues at stake. Champions network with the key agencies to ensure integration. Through their guidance and understanding of the issues and politics, they ensure the policy scope is appropriate. They provide a focal point for community education and encourage participation by all key stakeholders. Champions can argue and lobby for more resources and ensure that all sources of knowledge are made available. Finally, they can enlist the support of politicians and the community as a whole.

In short, a policy champion is a priceless resource, but may not always be available.

3. Key recommended actions

This section focuses on what are considered to be the three most critical barriers to good policy making and makes some recommendations to the key decision makers in coastal planning and management. These three barriers are not only the most important barriers in their own right, they are significant in that by addressing these barriers, progress in overcoming other barriers will also be made.

The three most significant barriers to good coastal policy making are considered to be:

- Lack of integration between and across governments;
- Inadequate and inappropriate public consultation; and
- The lack of resources and the inefficient application of existing resources.

Lack of integration between and across governments is seen as the most significant barrier, but the longer term solutions are about significant restructuring the way governments manage our natural resources.

Recommendation 1

Governments recognise that the lack of integration in the way the coast is managed leads to significant inefficiencies and less than optimal management. Efforts to restructure natural resource management with a focus at the regional and local levels should continue and there should be an increased emphasis on enhancing policy integration between levels of government and among agencies responsible for achieving improved coastal outcomes.

Inadequate and inappropriate public consultation is a significant fatal flaw in the development and implementation of many coastal policies. It can lead to an inadequate policy scope, an incomplete knowledge set, and a lack of political legitimacy for the policy.

Recommendation 2

Policy makers develop appropriate public participation procedures including representative steering groups with defined decision-making roles and responsibilities that recognise the site-specific local conditions and have representation from the key stakeholders including affected local communities and government agencies. Adequate resources, including time, needs to be given to public participation.

The lack of resources and the inefficient application of existing resources for coastal management continues to make both policy making and its effective implementation difficult.

Recommendation 3

Governments recognise that the current level of funding for coastal policy development and its implementation does not meet the community's expectations and is causing ineffective management of the coastal zone in many cases. All three levels of government need to work together to ensure that existing resources are used effectively and that additional resources be made available to meet the expectations of the community.

4. References

- Barry, G. and D. van Bracht (2002). Strategies for effective Coastal Planning and Management (Some Findings from a Coast and Clean Seas Project). Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Bega Valley Shire Council, NSW.
- Bennett, J. and P. Lawrence (2002). Adaptive Management Framework for Catchment and Coastal Management and Decision Making. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, EPA Queensland, Dept. of Natural Resources, Mines and Energy Queensland and Coastal CRC.
- Bragg, E. and P. Cuming (2002). Dealing With Our Own Situation: A community decision-making process for coastal management. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Sustainable Future Australia, NSW.
- Clarke, B. (2002). Coastcare: A Shining Model of Community Participation or Government Cost-cutting Device? Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, University of Adelaide, SA.
- Dovers, S. (2002). Governance: To Integrate or Disintegrate. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Australian National University, ACT.
- Gillham, A. and R. Read (2002). The Parsley Bay Remediation Project and the NSW Environmental Planning and Assessment Act 1979 – Applications in Environmental Remediation. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Clean Up Australia, NSW.
- Graham, B. (2002). Governance and Development in the Coastal Zone: The Resource Assessment Commission Coastal Zone Inquiry 10 years on. Coast to Coast 2002 - Source to Sea, Tweed Heads, NSW, Australia.
- Haines, P., D. Cavanagh, et al. (2002). Harnessing the Power of Community Consultation. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, WBM Oceanics Australia, NSW.
- Hill, C.J and L. E. Lynn Jr. (2004). Governance and Public Management, an Introduction. *Journal of Policy Analysis and Management*, 23 (1), 3-11
- Howard, M. (2002). Towards Good Governance in Fisheries Management in NSW Making Environmental and Social Impact Assessment Count. Coast to Coast 2002 - Source to Sea, Tweed Heads. NSW Australia.
- Lambert, J., M. Ierace, et al. (2002). Cabbage Tree Bay Aquatic Reserve – Partnerships in Action. Coast to Coast 2002 - Source to Sea, Tweed Heads, NSW, Australia.
- Lawrence, P. and J. Bennett (2002). Bringing it all Together. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, EPA Queensland, Dept. of Natural Resources, Mines and Energy Queensland and Coastal CRC.
- Lazarow, N. (2002). Human Impact on Australian Beaches (Victoria). Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Griffith University Qld and Coastal CRC.
- Le Tissier, M. and J. M. Hills (2002). Widening Coastal Managers' Perceptions of Stakeholders through Capacity Building. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, University of Newcastle, NSW.
- Morcom, N. (2002). Approaches for Integrating Coastal Management in South Australia. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, University of Adelaide, SA.
- Muir, M. A. K. (2002). Models for indigenous participation in coastal zone management in Queensland, based on the Canadian experience. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Arctic Institute of North America, Calgary, Canada.

- Oliver, P. (2002). Natural Resource and Environmental Management Partnerships: Panacea, Placebo or Palliative? Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Griffith University Qld.
- Resource Assessment Commission (1993). Coastal Zone Inquiry. Canberra ACT, Commonwealth of Australia.
- Smith, T. F. (2002). Institutional Analysis for Estuary Management. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Coastal CRC and Griffith University, Qld.
- Storrie, G¹. and J. Shaw² (2002). Coffs Coast Regional Park – Joint Management an Opportunity in Coastal Management. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Geoscience Australia. ¹NSW National Parks and Wildlife Service, NSW. ²Coffs Harbour City Council, NSW.
- Tarte, D. (2002). Community: What can be achieved. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, Marine and Coastal Community Network and Moreton Bay Waterways and Catchments Partnership, Qld.
- Thomas, N., C. Critchley, et al. (2002). Tweed River Estuary Health Monitoring Program: Communicating the Science to the Community. Coast to Coast 2002 - Source to Sea, Tweed Heads NSW Australia, The University of Queensland, Qld.

Acknowledgments

The principal author would like to thank the contributors listed on the front page of the report for their input. The Coast to Coast 2002 National Conference and the Coastal CRC funded this work, while the Curtin University of Technology provided support to the author during the writing of this paper.

Appendix 1, Authorship and contributors - Analysis of the Coast to Coast 2002 papers, workshop discussions and subsequent input

1. Introduction

One of the themes of the Coast to Coast 2002 conference was “governance” and there were many papers presented that dealt either directly, or in passing, with the objectives of this paper. The papers, workshop discussions and subsequent input from a group of interested conference delegates are reviewed in detail in this Appendix and provide background to the main part of the paper.

2. Conference paper

Bob Graham (2002) reviewed coastal planning and management since the 1993 reports of the Resource Assessment Commission and concluded that:

Despite the avalanche of words and a plethora of reports, there has been a failure of governance (p121).

Graham lists as the key barriers to good governance:

- An overheated real estate industry focusing on the coast;
- A significant increase in the numbers of people living on and using the coast;
- Static or declining management budgets; and
- The political protection of vested interests.

Whilst Graham goes on to list five critical steps to improved governance for the coastal zone, he does not suggest how these steps are to be achieved, which is one of the key objectives of this paper.

A paper on the management of the Cabbage Tree Bay Aquatic Reserve (Lambert, Ierace et al. 2002) is one of a number of papers that give insights into good policy making process, and suggests that:

the partnerships between organisations and the associated processes are crucial to facilitating coastal protection and shows how these can be linked through the preparation of comprehensive management plans (p236)

The keys to the success of this case study are seen as:

- A comprehensive and highly consultative planning process;
- The establishment of a representative Cabbage Tree Bay Steering Committee to oversee the planning process;
- The establishment of a working group to provide the fullest range of information to the steering committee;
- Council adopting a flexible attitude to and patience with the consultative process; and
- Scientific backing and strong community support for a strong conservation approach to be adopted by Council.

Bennett and Lawrence’s paper examined two case studies where an Adaptive Management Framework (AMF) was applied (Bennett and Lawrence 2002). They define adaptive management as:

a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs (p24).

Under this framework, and using the two case studies as examples, Bennett and Lawrence identify the following as key elements of good policy making:

- The policy making process needs to be agreed to by the stakeholders, for example, through a formal partnership and the establishment of a steering committee;

- It recognises that knowledge is not fixed but evolves during and after the policy making process;
- The information required for the policy needs to come from a range of sources which includes local knowledge of the various local stakeholder groups, and that these sources need to be integrated and made assessable to all parties through a formal communication strategy;
- The process needs to be guided by the affected communities (community stewardship);
- Prior to deciding on policy measures a participatory process needs to be undertaken to establish agreed vision and environmental values that will form the basis of the policy. These aspirational statements need to be consistent with the existing institutional environment (legislation, existing strategies, and goals of existing government agencies and regional natural resource management coordinating groups); and
- As part of the policy formulation process, management goals and targets are agreed to, and the social, economic and environmental impacts for various management options are evaluated by all the stakeholders.

AMF recognises that learning is a key component of the policy making process, particularly where there is uncertainty regarding the possible outcomes of applying certain measures and it is not possible to postpone action to address a problem. Consequently, a flexible policy response is required which also includes monitoring for changes. This monitoring can then provide feedback on the impacts of the various policy measures so that ongoing policy fine tuning can occur.

Nicole Morcom in a paper about coastal management in South Australia (Morcom 2002) identified the lack of integration between the various levels of government, between agencies and between governments and the community as a key barrier to successful coastal management.

Bev Clarke in a review of Coastcare and community participation (Clarke 2002) noted that community participation is crucial for successful integrated coastal management but noted that participation ranged from the public being kept informed to being part of decision-making.

Glenn Storrie and John Shaw in a paper discussing the proposed Coffs Coast Regional Park are optimistic about the prospects for the proposed management framework noting

Challenges still lay ahead to successfully implement the regional park however, commitment by both organisations to integrated management will find solutions to these challenges (Storrie and Shaw 2002: p451).

The key elements of that framework are:

- Including all land irrespective of ownership under the one management framework;
- An MOU was developed between the Coffs Harbour Council and the National Parks and Wildlife Service (for the State Government); and
- Community participation through the establishment of Trust Board (2 Council, 1 NPWS, 2 local Aboriginal and 2 community), development of a communication strategy and broader involvement of the Aboriginal community (employment, and including cultural heritage as part of management).

Elizabeth Bragg and Peter Cuming in a paper discussing the development of sewage management strategies (Bragg and Cuming 2002) stress the importance of having a good community participation strategy in decision-making. They have developed a model for community participation and decision-making that has five key elements to ensuring the success of any management strategy:

- Establishing a representative Community Consultative Committee at the start of the process that has a strong role in advising on decision-making, including, in deciding its own terms of reference;

- Developing a comprehensive communication strategy;
- Continued up-skilling of the committee;
- The committee having direct input into any consultant's brief; and
- Developing and applying an options evaluation process where choices have to be made between various management options.

Phillip Haines in a paper on estuary management in NSW (Haines, Cavanagh et al. 2002) states that:

Obtaining local knowledge and 'feeling the vibe' through the consultation process represented a critical step in the development of an effective and well-focused long term management plan for these estuaries (p137).

The paper goes on to describe the community participation process applied in this case in detail, noting in particular that the location of the case study was remote from main population centres, and concluded that:

- Consultation strategies need to be tailored on a case-by-case basis, but noted that traditional methods (e.g. public meetings) were not successful;
- The use of a fulltime Community Liaison Officer who became a "temporary member of the community was very warmly received" (p140);
- Whilst the formal community consultation period was seen as being long and expensive (10 weeks and \$40,000) it was well worth the effort, time and expense; and
- It was especially important to have resources on the ground in these isolated locations during consultation, both formal and informal, and not manage things from a regional centre.

At a more detailed level, the paper notes that public meetings and coverage in the media didn't work or had limited value.

On the other hand, the following worked well:

- One-to-one meetings with stakeholders and groups;
- Promoting the exercise through existing local events and attending normal meetings of stakeholder groups; and
- Just being on the ground and available at all times during the review period.

Nathan Waltham, Trudy Thompson and Riku Koskela prepared a paper that reported on the successful community based integrated catchment management in the Loders Creek catchment. The key problems identified in the programme were:

- A shift of emphasis from the funding agencies from local action to regional approaches;
- The demands of reporting to the funding agencies;
- Monitoring and evaluation requirements;
- Unreasonable deadlines;
- The short term nature of funding arrangements; and
- Getting long term commitments from volunteers.

The first issue was of particular concern.

In a paper examining the management arrangements implemented by institutions involved in estuary management, Smith identified several key external pressures that caused changes in management which were set up over time within some formal legislative or politically endorsed framework (Smith 2002). These pressures are:

- Community and subsequent political demands;
- Incentives from other management groups;

- Involvement of “champions”;
- A perceived management need by the community or a management group (e.g. from a lack of management response from other management groups); and
- Pressure from researchers who feed new information into the management process.

These pressures cause changes in management arrangements that are informal (*de facto*) and may not sit within any existing legislative frameworks. Smith acknowledges that these changes better facilitate adaptive management approaches but raises the possibility that measures adopted may not have legal standing and may not meet funding criteria.

Mike Berwick (2002), in a paper on the role of Local Government in coastal management argues that:

our major problem is not a lack of science although there are knowledge gaps and research is required. Nor is it a lack of willingness by the community to see the environment properly looked after and sustain ably used (p29).

Instead, the three key problem areas identified are:

- Lack of political commitment;
- Lack of resources; and
- Institutional dysfunctionality, or a lack of integration between government agencies and between the three layers of government.

Berwick sees the last problem as the greatest, and the solution is to remove State Governments and to restructure Local Governments along natural resource boundaries.

In his paper on the role of partnerships in natural resourced management, Peter Oliver argues that

(s)ome natural resource and environmental management problems and opportunities may be more amenable to the formation of partnerships than others (Oliver 2002: p335).

Those problems that are difficult to address solely using a partnership approach are those that:

- Have a large scope;
- Have a large constituency;
- Relate to publicly owned land;
- Are likely to have long term impacts;
- Involve mostly policy and regulatory measures to succeed;
- May set precedents for other situations;
- Require the partners to take on greater authority than currently exists;
- Requires the mandate of government;
- Have large differences in the extent of power yielded by the various partners;
- Require fundamental values to be addressed causing significant conflict at the earliest stages of the process; and/or
- Rely on a bargaining process of the need to seek agreement.

Partnerships involve sharing of decision-making and resources, which inevitably leads to a re-negotiation of the power relationships within and between the groups forming the partnerships. Oliver describes three key criteria that should apply to ensure partnerships work:

- Legitimacy;
- Fairness; and
- Wisdom.

Legitimacy refers to ensuring that any existing legal requirements or management arrangements are not circumvented by the partnership. The partnership also needs to be clear about its mandate and work only within that. When that mandate is changed through the political process, then the partnership needs to be re-examined.

Fairness is about ensuring that all the key stakeholders are involved and have the capacity to be fully involved. This may require some resource reallocation to groups that have few resources, for example community groups. It may also involve choosing meeting times and places that ensure all parties can attend. Decision-making needs to be open, accountable and transparent and rely on consensus as much as possible.

Wisdom is about sharing information in a manner that is comprehensible to all parties. Any decisions made need to be consistent with the available information, and require uncertainties to be identified and monitored so that adaptive measures can be applied.

If partnerships are entered into for the wrong reasons, for example to abrogate responsibility for an issue or as a public relations exercise, it will lead to poor natural resource management and "breed mistrust and cynicism" (p336).

In a paper on the role of Non Government Agencies (NGOs) in natural resource management, Tait et al (2002) argue that lack of integration is the most significant barrier to effective coastal management, both between agencies and the layers of government, and across all the elements of the coast (for example, estuaries and floodplains are often not included in coastal management strategies). They claim that:

In the situation where wetland resources like estuaries are everybody's responsibility, there is a danger that they become no one's responsibility. When agencies do take on a lead role in the development of management plans for wetland resources there is often a risk that they may be perceived by other agencies to be over stepping the boundaries of their jurisdictional responsibility, and in worse case scenarios turf wars stymie on-ground management progress. (p455).

In arguing the case for greater NGO involvement in management, the authors note that government agencies can not always deliver good management because:

- One agency cannot always get the cooperation of other agencies because of entrenched positions about roles and responsibilities;
- They are often too closely controlled by the relevant Minister and may not always be able to advocate a position that maybe unpopular in the community. These agencies often do not have the capacity, credibility and resources to work with the community to get a better understanding of unpopular measures;
- Some agencies have to carry out a dual role of regulator and a facilitator of policy development. In these cases the public may become suspicious about the agency's motives; and
- Agencies may often have a clear implementation function and not have the resources and capacity to do the on-the-ground consultation required as part of policy development.

In a paper on the management of Botany Bay, Jim Colmen (2002) argues for the importance of using partnerships because:

The record suggests management arrangements relying on a statutory or legalistic base are inappropriate when it comes to dealing with complex environmental resources such as the Bay. Success is more likely when parties come together voluntarily to agree on targets and strategies share resources, forge alliances and agreements of various kinds, and literally 'get on with the job'. (p60)

In these cases, good management will follow when:

- There is strong community support for environmental improvement;
- Participation goes beyond the traditional bureaucratic consultation process and allows genuine participation in decision-making;
- There is effective inter-agency coordination within State Government;
- There is a holistic approach adopted in carrying out environmental assessments so that cumulative impacts are considered;
- An independent inter-disciplinary scientific research be used in the management of the Bay and full consideration is given to all of the impacts of new proposals; and
- An individual champions the need for good management.

Mary Howard in a paper on the impact assessment process as applied to the commercial fishing industry in NSW (Howard 2002) calls for a holistic approach to both assessment and on-going management claiming that:

we need to move away from this piecemeal approach experienced to date. We need to adopt a more holistic process that includes frameworks for assessing the environmental impacts of not only commercial fishing activities, but also recreational fishing activities and land based sources of aquatic loss and pollution and integrate this. (p200)

In a paper on promoting better community understanding of the management issues associated with the Tweed River, Nicola Thomas and her co-authors argue that:

Human behaviour is a key element that both contributes to, and helps solve, environmental problems (Thomas, Critchley et al. 2002: p471).

A science communication programme was initiated in an effort to improve the management of the catchment and to ensure that agreed management measures are put in place. They concluded that, whilst there were some limitations to the research,

science communication can increase estuary knowledge and responsible actions of individuals (p474).

One of the key aspects of the programme was that it was action research, which means that the results of the communication strategy were continually monitored and the communication strategy modified accordingly, suggesting that management needs to be adaptive and that managers need to be continually learning.

In a paper about capacity building for coastal managers Martin le Tissier and Jeremy Hills argue that whilst it is important to have a good understanding of the natural processes at work in the coastal area:

Sophisticated scientific understanding of the coastal zone cannot in itself achieve ICM and can cause further coastal conflict. Perceptions of coastal resources between groups can be varied, diverse and conflictory (Le Tissier and Hills 2002: p245).

The key to achievement ICM is to focus on the various users of the coast and establish a holistic view of the various stakeholders' perceptions of the coast, which will then allow for sources of conflict to be identified. Appropriate knowledge for all the relevant areas is then used to resolve those conflicts. Training managers in how to identify the diversity of perceptions about the coast and how to manage the resultant conflicts (capacity building) is seen as being as important as being trained in the technical side of management.

In a paper presented as part of the scene setting for the conference Stephen Dovers took a broad view of natural resource management, governance and the need for integration to achieve sustainable use of our resources (Dovers 2002).

Dovers sees that integration needs to be of:

- Information sources (knowledge);
- Management institutions which would likely involve new institutional arrangements;
- Different values and expectations of the various stakeholders;
- Space, where natural boundaries are used instead of institutional boundaries;
- Policy across the ecological, social and economic fields;
- Time, including both long- and short-term considerations;
- Government and civil society; and
- International and national imperatives.

Integrating knowledge, involves, not only across ecological, social and economic fields, but also cultural and local knowledge.

Policy integration involves developing new techniques to deal with quantitative and qualitative information under conditions of significant uncertainty.

The integration of government and civil society means going beyond devolution of responsibility of actions but also devolution of decision-making.

The key barriers to the achievement of this integration are:

- Our history of disintegrating natural resource management;
- The current trend for politics to be populist;
- The Australian public's cynicism towards government;
- The decline in institutional capacity brought about by governments being more concerned about efficiency, cost cutting and short term economic aims rather than necessarily about effectiveness;
- Lack of long term ecological monitoring;
- Lack of monitoring of policy implementation effectiveness (i.e. that policies are delivering the desired outcomes); and
- The Commonwealth Government's recent pulling back from being a positive contributor to international debates on some key global issues.

In a paper describing the outcomes of a Coast and Clean Seas funded project in Bega Valley in NSW, Garret Barry and Derek van Bracht note the importance of learning in developing an effective coastal management strategy (Barry and van Bracht 2002). The key lessons learnt were:

- Cooperation between the three levels of government is necessary, but it is important to recognise the political limitations to that cooperation;
- Community participation was important, including the need to establish a representative committee to oversee implementation and have ongoing communication with the community;
- Statutory controls aimed at conservation will only work if they are complimented with a programme of extensive consultation, education and financial assistance for the affected landowners; and
- The implementation of the agreed strategy will only be achieved if the agencies responsible are adequately resourced to do the works.

A common theme with many papers was the significance of community involvement or public participation in ensuring good coastal management. Diane Tarte's paper suggests that the key elements of facilitating community involvement are:

- Identifying key individuals and interests;
- Being relevant;
- Taking time; and
- Having continuity (Tarte 2002).

In her presentation to the conference Diane presented a model of Adaptive Management, which was later picked up and made the theme for one of the closing presentations summarising some of the key outcomes of the conference.

Neil Lazarow's paper notes that:

Most major reports and inquiries into coastal management during the past 30 years have called for greater and more effective involvement in decision-making (Lazarow 2002: p242).

He also notes that these same reports have three other key recommendations in common:

- Clear identification of agency responsibilities;
- Better coordination; and
- Improved training of coastal managers.

One key advantage of community consultation is the harnessing of local knowledge. This is nowhere more important than in dealing with indigenous people (Muir 2002).

In a paper discussing a remediation project in Parsley Bay, NSW, Angela Gillham and Rose Read report that whilst continuous negotiations and consultations with the relevant authorities was a key element in achieving success, there was also a need for innovation in the face of a seemingly inflexible statutory framework (Gillham and Read 2002).

In a paper on the management and policy arrangements for Cockburn Sound, Garry Middle reports that the keys to the success of those arrangements are:

- The Chair of the management authority is independent and seen as a champion for the Sound;
- The management plan was developed largely by the stakeholders and has a high degree of ownership by those groups; and
- The management authority adopts a cooperative approach to management using consensus.

Some key concerns that may prove to be a barrier to successful implementation are:

- A perceived lack of real input into the formulation of the policy from both community and industry;
- Concerns about the representativeness of the management authority and that the collective community voice might be outweighed by the government agencies; and
- The management authority needs on-going adequate resourcing to be effective.

3. Conference workshop

The workshop discussions that followed the presentation of the papers provided some useful points about the policy making process. Workshop 2a (Governance; Success and Failure) noted that resources and leadership were key issues. In particular:

- Better coordination between agencies;
- Smarter use of existing resources;
- Make it clear upfront in the process what resources are available;

- Skill development especially communication;
- More resources for implementation; and
- There is a need to identify and make clear upfront who is the lead agency – this may not be a government agency.

Workshop 2b (Policy Overkill?) noted that the key issues were:

- Jurisdiction – clearly identifying of the extent of the area to be managed i.e. cadastral, natural, management based, value based;
- Negotiation with stakeholders;
- Building partnerships;
- Adopting a holistic/ecosystem based management approach;
- The level of resilience, both socially and ecologically, needs to be taken into account;
- The application of incentives, both voluntary and forced, needs to be considered; and
- Appropriate scale for decision-making needs to be determined.

Workshop 2c (Institutional Dysfunctionality) listed the following as key issues:

- Inflexible system;
- Resourcing;
- Strategic assessment of natural resource management portfolios;
- Management response lag time;
- Increase educational profile – make coastal management/environmental management core;
- Business;
- Clear goals are needed;
- Integration of environment with other issues such as pure economic;
- Internal dysfunction e.g. policy vs. operational staff, operationalising policy;
- It's cheaper in the short-term to perform poorly on environment, 'cheaper to be bad'; and
- Commitment to evaluation of institutional performance.

Workshop 2d (Consulted to Death, Institutional Arrangements, Incentives and Governance) listed the following as the key issues:

- Expert opinions often don't meet political considerations – bureaucrats need to learn how to listen; and
- There is often a problem in moving from decision-making to actions on the ground.

In their presentation at the end of the conference summing up some of the key outcomes, Paul Lawrence and John Bennett use the Adaptive Management Framework as a model for better coastal planning and management (Lawrence and Bennett 2002), based on a paper by Diane Tarte (Tarte 2002).

Lawrence and Bennet argue that Adaptive Management has the following advantages:

- Learning is central and is incorporated as a systematic process for continually improving management policies and practices;
- It focuses on the specific location the subject of management and the place-specific issues;
- Is most appropriate when dealing with imperfect information and where trial and error is unacceptable; and
- Is proactive and not reactive.

The key elements of Adaptive Management are:

- Use of partnerships (i.e. power sharing);
- Information is taken from a wide range of sources and presented in ways that improve communication with the full range of stakeholders;
- A systems analysis approach is adopted that involves vision building with all stakeholders;
- Plan making has to be flexible to deal with the uncertainty and the learning that occurs during implementation;
- Implementation involves on-going community participation and education, and the use of positive incentives to change human behaviour; and
- Has built into the implementation phase monitoring and review so that the plan can be modified as a result of lessons learnt.

4. Subsequent input

There were two opportunities for input into this paper following the conference. Firstly, an email group was established from interested conference delegates. Various drafts of this paper were circulated to members of that group and comments sought. Secondly, a separate consultation group was formed involving those writing the theme papers and some of the Coastal CRC staff. Members exchanged papers during the drafting process and met once as a group in Sydney.

The key additional issues to arise from this post-conference consultation were:

- Institutional and leaderships inertia is a key barrier;
- Political timeframes are often different from policy timeframes which can cause problems when governments change during the preparation or implementation of a policy;
- Industry is often heavily affected by a coastal policy, whether it be farmers, fishing industry, tourism or the development industry. Industry often has significant political sway and is in a strong position to influence policy outcomes and implementation; and
- The issue of lack of integration is not just about, between, and within the various levels of government, but is also about spatial integration, integrating science into the policy process and integrating the sources of knowledge for various agencies in varying formats.