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Comprehensiveness, Integration, and Coordination

A Study of their Application and Role in Coastal Management

in

Aotearoa/New Zealand

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ABSTRACT

Coastal management practices in Aotearoa/New Zealand have historically been counterproductive in terms of maintaining environmental quality. A plethora of complex legislative and jurisdictional arrangements is identified as a primary contributor to high social, economic and environmental costs. The nature of the coastal resource, and the demands placed upon it, dictate a more comprehensive, integrated approach to management.

Recent reform of resource management law has produced a framework for coastal management that is found to be in many ways superior to any previously existing, but still far short of replicating any 'ideal type'. The new legislation and institutional arrangements are characterised by a more comprehensive approach, and contain integrative mechanisms. A greater degree of comprehensiveness and integration is desirable, but will not, for a number of conceptual, political, and practical reasons, be readily achieved.

An argument is advanced that at least some of the shortcomings of the management regime as it is interpreted and practised may be overcome by better <u>co-ordinating</u> the activities of agencies and individuals that have an impact on the coastal environment.

The verb `co-ordinate' is used in this instance quite deliberately. Like all language, the word is value laden, and capable of being interpreted (or `deconstructed', to use the post-modern vernacular) in an enormous variety of ways. Some care is taken to establish exactly how the term is utilised, and should be interpreted, in the context of this paper.

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WHAKATAUKI

Toi tu te marae o Tane

Toi tu te marae o Tangaroa

Toi tu te iwi...

If the marae of Tane (Deity of the Forest) survives

If the marae of Tangaroa (Deity of the Sea) survives

The people live on...

(Kai Tahu whakatauki)

"The people of these islands will forever be involved with the sea. The point of involvement is the coastline, where land and sea meet. The coast of Aotearoa/New Zealand stretches from subtropical seas to the cold water of the subantarctic. Its beaches and people, ironsands and shellfish, the harsh light, the crimson of the pohutukawa, the crash of the surf, all these are part of a great total resource. Whatever the economic benefits, whatever the value of the coast as real estate, these are far outweighed by the value of the social resource. The physique, the spirit, the minds and imaginations of the people of Aotearoa/New Zealand, now and of generations to come, depend on the way we manage this heritage today" (Thom 1973).

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CHAPTER ONE: PROBLEM STATEMENT AND BACKGROUND

1.1 Introduction

Aotearoa/New Zealand has an inordinately long coastline, invested by its peoples with a significant

burden of social, economic, and cultural values. Perceptions of the nature of the coastal

environment, and what uses (or non-use) of it are appropriate, vary according to some appreciation

of its value(s), whether in cultural, spiritual, recreational or economic terms, or a mixture of these.

The coastal zone is a dynamic, highly varied and sensitive environment. Human activity both

affects and responds to this ever changing physical landscape.

An argument is made that the coastal environment has been poorly managed. Symptoms of

mismanagement include poorly planned and executed coastal subdivision, that has imposed high

environmental, social, and economic costs. Coastal waters have been polluted by sewage and

stormwater discharges; there is evidence of a loss of biodiversity along the coastal margin. Visual

and scenic values have been diminished, and public access to beachfront areas reduced.

A number of factors may be identified that have contributed to poor management practices. These

include inadequate knowledge and understanding of the physical, ecological and cultural systems of

coastlines (Kirk 1987, Carter 1988); changes in perceptions and associated use of the environment;

poorly defined property rights; and the impact of competing ideologies (Rennie 1993).

Foremost among these factors, and often compounding them, has been a jumble of legislative and jurisdictional arrangements, gaps in the management framework, duplication and overlap of responsibilities, and lack of integration (Ministry for the Environment 1988). For at least two decades critics observed that coastal planning lacked any national or even regional vision or overview (Morton et al 1973). Decisions that affected the coast were made, all too often, on the basis of narrowly focused local interest, with little regard for long term impact or wider implications. To step across the high water line was to move from one jurisdiction to another, typically administered as though one had little or no impact on the other. Coastal management was characterised by a variety, and at times an inordinate number, of statutes and agencies.

A dominant theme of the criticism was the perception that coastal management needed to be more 'integrated', both institutionally and in terms of linking management of land and sea (Morton et al 1973; Ministry for the Environment 1980,1988).

1.2 Objectives

This paper will focus on the following:

- (i) the theoretical underpinning to the assumption that `integrated' management will produce `better' environmental outcomes
- (ii) the extent to which the Resource Management Act 1991 establishes a more comprehensive, integrated framework for coastal management
- (iii) whether the integrative mechanisms (if any) of the legislation are being realised in practice

(iv) the existing and potential role of coordination of agencies with responsibilities in the coastal environment

It is argued that a more comprehensive, integrated approach to environmental policy making is appropriate and desirable. Such an approach, however, cannot by itself be relied upon to produce preferred environmental outcomes. A central theme of the paper is to consider the extent to which the current coastal management regime, as prescribed by the existing legislative framework, is 'integrated' or 'comprehensive' enough to contribute to the statutory objective of promoting sustainable management of the coastal environment.

The task overall has been complicated by the fact that many of the structures and mechanisms prescribed by the new coastal management regime are still in an early stage of development. The transition from the old to the new is far from complete. This may hinder, but ought not to preclude, the attempt to analyse how much the implementation of the new coastal management regime might contribute to the 'ideal state' of meeting demands, resolving conflicts, and fulfilling the imperative of sustainability.

There is both a statutory and a moral directive to include the perspectives and interests of tangata whenua, as Treaty partners, into resource management in general, and coastal management in particular. Maori have many understandings of the use and differentiations of water. Waitai is the name given to describe the sea, surf and the tide. It is used to distinguish sea water from fresh water. "Waitai is water that has returned to Tangaroa (the Sea God), in the natural process of generation, degradation and rejuvenation. Such a notion does not seem antithetical to modern

science" (Douglas 1984). Coastal areas have always had considerable significance for Maori, both in terms of te kauae runga (things spiritual), and te kauae raro (things earthly). This paper will make only passing reference to the role that te iwi could or should play in managing the coastline, not because it is a small matter, but rather because it is sufficiently complex and important an issue to warrant a study of its own.

1.3 Structure of this Study

Chapter 1 describes the nature of the coastal environment, its role as a `resource', and certain key characteristics of the environment and its uses. Some of the management implications of these characteristics are highlighted.

Chapter 2 introduces and discusses concepts of comprehensiveness, integration, coordination. It proposes working definitions of these terms, and reasons why they may or may not enjoy support or credibility in various contexts. It will describe and discuss more fully concepts and models of coordination that may be applied to analysis of the coastal management regime. Characteristics of four models of coordination are summarised in terms of structure, processes, outcomes and values.

Chapter 3 introduces the legislative framework for managing the coastal environment. A brief historical overview is given. The more recent and radical changes in coastal management are placed in the context of the wider reforms in environmental policy, resource management, and the forms and institutions of central and local government in New Zealand. The Resource Management Act 1991 is considered in light of the earlier discussion of comprehensiveness and integration.

Chapter 4 considers some examples of how the new legislative framework is being developed and implemented. Key features of the New Zealand Coastal Policy Statement with relevance to integrated management are outlined and discussed. This is followed by a summary of a study of correspondence, submissions and the results of interviews with representatives of the primary statutory bodies charged with coastal management in the Canterbury region - the Department of Conservation, Ministry of Agriculture and Fisheries, and the Canterbury Regional Council - and offers an analysis of what is occurring.

Chapter 5 will endeavour to bring together the various threads or elements of the preceding discussion. It finds that coastal management is indeed more integrated than at any time in the recent past, but problems caused by fragmentation and administrative overlaps and anomalies still exist. These may be, and to some extent are being, overcome by (formal and informal) coordination practices between agencies. Some tentative proposals are made as to how the situation might be improved or enhanced within the general limits of existing institutions.

1.4 The Nature of the Resource

1.4.1 The Coast as 'Resource'

To speak of the coastal environment as a 'resource' is to invite criticism, even condemnation, from those who perceive the environment generally in more 'holistic', non-utilitarian terms. In this context, however, the coast is nominated as a resource not only in recognition of its well known and long-exploited capacity to supply tangible goods such as food and minerals, but also to reflect its role as an 'amenity resource', a more 'modern' concept that encompasses intangible values such as

environmental quality, variety, and ecological harmony (O'Riordan 1971:Chap.1). The word resource may be taken as a convenient shorthand for a longer, more inclusive, but also unwieldy definition that incorporates cultural, spiritual, recreational, and aesthetic, as well as economic, values.

1.4.2 Physical and Ecological Characteristics

New Zealand has some 15,000k of coastline¹, which includes a diversity of shore forms, ranging from exposed rocky ocean coast to sheltered sandy bays. The only significant form not represented is coral reef. This diversity reflects a combination of geological and geomorphic evolution - the relative isolation from other landmasses, that contributed to biological and ecological development with little external influence; the position of the country that exposes it to major wind and oceanic current circulation systems across 20 degrees of latitude; and the interaction over time of sun, sea, air and biota to create the various coastal environs (Rennie 1993:151).

Continual change is a primary characteristic of the coast - the dynamics of the coast are expressed in the movement of sediment, and in the patterns of wave movement, water circulation and wind effects. Coastal features are not stable. While ecosystems continue to evolve and adapt to the natural process of change, they are very vulnerable to the impact of human activity and its associated impact on coastal values.

The coast is linked to 'other' environments by flows of water, sediments and other materials (e.g. rivers carrying organic and inorganic loads) and by the passage of organisms such as fish whose life

¹ Estimates of the exact length vary, but the most commonly accepted figure of 15,000km is based on measurements using NZMS 1:50,000 scale maps

cycle involves periods in both fresh and salt water. Human intervention and activities on both land and water bodies, either adjacent to or even some distance from the coast, are capable of having an impact on the coastal environment. The damming of the Waitaki River, for example, altered the river discharge and its delivery of coarse bedload to the coast, to the extent that cliff erosion has superseded the river as the largest source of beach renewing sediment (Hansom and Kirk 1990).

New Zealand's marine life is representative of that found elsewhere in the world, in terms of total species, types of habitat and biological production. In addition, it is becoming clear that the country's unique terrestrial flora and fauna, from kauri to kiwis, have marine counterparts such as giant kelp, dolphin species and many smaller but no less interesting forms (Ballantine 1991:15). So New Zealand's coastal ecosystems are unique, and some areas and species are of international significance.

Biodiversity is an important element of the coastal zone. On a mountain, a zonation of vegetation types may be completed in 8000 feet. On the seashore a comparable sequence of life forms may be compressed within a vertical range of eight feet. All the major groups in the animal kingdom have representatives on the shore, and this is true of no other place (Morton et al 1973:6).

1.4.3 Understanding the Coastal Environment

Coastal geomorphology, that is the study of coastal landforms and the physical processes that shape them, is a well defined part of geography and has been actively studied in New Zealand as elsewhere for many years. Short term predictions of how coastal processes are likely to develop in a coastal situation not subject to human activity or intervention can be made with some degree of confidence. However, it is enormously difficult to anticipate the changes that might occur over a

longer time span, even a few decades, in coastal areas that have been modified or developed. (Kirk 1983:187). The effects on coastal ecosystems and the wider marine environment of human activity and development, either on the coast or on land adjacent to it, are even less well understood.

This lack of understanding or knowledge is by no means unique to New Zealand. An Australian

Government enquiry into coastal management noted in 1991 that despite more than a decade of significant investment in research, there remained `a serious lack of information on the coastal zone' (Dutton et al 1994:61). In Great Britain, a 1947 government paper on nature conservation noted a lack of research into coastal problems and issues, especially coastal erosion. Over forty years later there is still no "...coherent body of coastal data that has been systematically collected for the purpose of highlighting [physical] change or, for that matter, any other coastal purpose" (Hansom and Kirk 1990:53).

1.4.4 Definition and Use of the Coastal Environment

To prescribe or draw boundaries around any particular 'environment' or ecosystem is seldom simple or indeed rewarding. This general difficulty is compounded by the dynamic, ever-changing nature of the coastal environment. Coasts are where the atmosphere, the hydrosphere, the geosphere and the biosphere all meet in complex interaction (Kirk 1994). For some purposes, a general definition of the coast as being 'a zone of variable width characterised by interactions between land and sea' may suffice. The accepted legal definition of the coastal environment is simply that it is 'an environment in which the coast is a significant element or part' (DoC 1994:14). Some of the difficulties of defining the coast more precisely for the purposes of management will be discussed in a later section. Sufficient for the moment to recognise that

"...the coast is ...larger, more complex, more diverse, more dynamic and less well understood than any terrestrial environment" (MfE 1988:ii).

In a very real sense the coast has most often been `defined' by the uses which humans have found for it. Some of these uses may be summarised as:

<u>Transport</u> - historically the coastal margins and coastal waters were a vital transport route. At least until the early decades of this century, it far outweighed the importance of land transport. While for domestic purposes water transport is now of reduced significance, much of Aotearoa/New Zealand's income is derived from commodities that pass through its ports en route to overseas markets.

Recreation and Access - New Zealanders enjoy ready access to the coast to pursue a wide range of recreational activities, both active and passive. There is a powerful and deeply ingrained belief that access to the coast and its resources is a right, part of the country's natural heritage. Demands to maintain and enhance this access, and to provide facilities associated with recreation (especially for launching, mooring and servicing boats), can conflict with protection of the environment.

<u>Development</u> - in particular the building of private dwellings, holiday homes and tourist accommodation on or near to the coast. This development has traditionally been pursued with little regard to natural coastal values, and has resulted in modification of landforms (notably dunes), destruction of wildlife habitat, interference with (poorly understood) processes such as sediment flows, and pollution. The 'ribbon' development typical of the 1960s and 1970s was characterised

by a loss of the special character of many areas. The cost of roading and other infrastructure was raised by the 'strung out' nature of development. Sewage treatment was often inadequate, and costly to upgrade. It was claimed, in reference to a coastal subdivision in the Bay of Plenty, that

"The characteristic pattern of a heterogeneous collection of structures strung out loosely along the beach, and sometimes elevated on sand dunes, with accompanying power poles and wires, violates the special scenic quality of the coastline. As a formula for visual, biological and social destruction, this kind of approach probably cannot be bettered" (MOW 1967)

Extraction and Harvesting - fish and shellfish were an important resource for Maori in pre-European history, and remain highly valued to the present. Kaimoana within a given district was prized as a local food source, a delicacy to offer visitors, and as an item of trade. Kaimoana, as with other resources, is important not only in economic, but also in cultural or spiritual terms. The right to occupy an area and utilise its resources is inseparable from individual and collective mana. The loss of access would bring not only deprivation and disgrace, but also spiritual anguish (Evison 1993). Taking of seafood by both amateur and commercial fishers is also an activity entrenched in Pakeha culture and psyche. Mining of minerals from the coast, in particular iron sand and aggregate, and to a lesser extent petroleum and other minerals, has on occasion created a conflict of interests and values.

<u>Wastes</u> - the disposal into coastal waters of sewage, stormwater, dredgings and other unwanted byproducts of human activity has often occurred with little planning or thought for the consequences. Estuaries in particular have often been used as dumping grounds for rubbish, and

the reclaimed land put to agricultural or recreational use. In 1974 the Rodney County Council, under pressure from residents and developers, undertook to construct a sewage disposal scheme on the eastern tip of the Whangaparaoa Peninsula, north of Auckland. The scheme involved only minimal primary treatment of waste, before it was discharged through an outfall into the Tiri Channel. The Auckland Regional Authority, supported by the North Shore Drainage Board, objected on the grounds that the proposed scheme was an example `of growth without adequate consideration of the consequences', and that the project should be `reappraised using a comprehensive regional view' (Commission for the Environment 1974:Vol.1). The Ministry of Works (MOW) commented in its submission to the Commission that the Rodney County was driven by a narrow objective ` to satisfy demands [for development] rather than to shape and control them'(ibid, Vol.2) The MOW feared a plethora of piecemeal schemes, and regretted that regional planning was not sufficiently advanced or empowered to impose a more structured, balanced design of sewage treatment (and other) services for the region.

Coastal Hazards - A `natural hazard' is created when some change or event on the coastline threatens areas of human occupation or use; there is no hazard except in terms of human interaction. Most often the response to perceived hazard has been a call for an engineered or technical `solution', rather than looking (for example) to social or legislative responses. The South Brighton Spit encloses the Christchurch's Avon-Heathcote Estuary, and like all sandy spits is subject to oceanic forces. It is strongly influenced by tidal hydraulics and by changes in the sediment balance between contributing catchments, the estuary and adjacent open beaches. The area of the spit is known to vary, with a 90 metre variation in width and a 400 meter variation in length (North - South) known to have occurred between 1849 and 1977 (Kirk 1994). The uncertainty about where the boundaries of the Spit will be over time makes it a hazardous site for

building. Nevertheless many homes have been built to seaward of the Spit as it existed as recently as 1955 (ibid).

This list is far from exhaustive, but provides a basis for identifying the many issues that arise from human uses of the coast. It lends weight to the claim that

"...it is these uses, rather than the coast itself, that require management" (MfE 1988).

1.5 Implications for Management

The coast has long been perceived as a 'resource' capable of fulfilling a range of needs and uses. Multiple demands on a resource inevitably creates a degree of conflict. Sustainable management must achieve a balance between use, development, and protection of the resource without compromising human well-being or ecological integrity.

The coastal environment is dynamic, characterised by diversity and constant change. Elements of the coastline of New Zealand/Aotearoa, its landforms and biota, are of national and international significance - some are unique.

Interactions within and between the coastal and 'other' environments, and the impact or likely consequence of human activities, are poorly understood. What is known is that modification or

development of the coastal environment can often have longer term repercussions that are costly in human, economic and environmental terms.

These conditions would predicate a management regime that recognises and accommodates (at least) the following realities:

- (i) That the coastal environment is inextricably linked physically, ecologically, and culturally with 'other' environments, and so cannot be managed sensibly in isolation
- (ii) that administrative or jurisdictional boundaries should where possible be eliminated, or at least minimised, and in any case should not be confused with or taken to imply 'natural' boundaries or actual separation of 'environmental media' (see below)
- (iii) that in the absence of good knowledge or understanding management should incorporate the 'precautionary principle'.
- (iv) that existing (and currently legal) uses and activities must be recognised, and at least to some extent provided for
- (v) that given the likelihood of conflict, policy should be legitimated by allowing input from a range of interests and perspectives.

The following section will pursue the argument that these criteria are most likely to be satisfied within the context of a comprehensive, integrated, coordinated approach to environmental policy.

CHAPTER 2 - COMPREHENSIVENESS, INTEGRATION, AND COORDINATION IN PUBLIC POLICY

2.1 Introduction

It has become increasingly common to find, in both academic literature and government policy documents, reference to the virtue and indeed the necessity of a more `comprehensive', `integrated', `coordinated' approach to policy making generally, and environmental policy making in particular. Exactly what is understood or implied by these references is not, however, always made clear, but becomes lost in a `tangled semantic swamp' (Bartlett 1990:245). It has been claimed, in one discussion of comprehensive or integrated policy making, that "...few concepts have been used in more muddled and even duplicitous ways in policy discourse" (Buhrs and Bartlett 1993:137). This section will explore the range and complexity of the debate, and will endeavour to make explicit the way in which the terms are interpreted in this paper.

Despite the evidence of a degree of recognition that integration is an appropriate and worthwhile goal, policy makers seem to have made little progress in this direction. The lack of clarity as to what comprehensiveness, integration, and coordination mean has certainly contributed to this lack of real progress. Without presuming to offer any definitive answer or solution, some attempt will be made to put these terms in context. A preference for coordination will be put forward as a defensible and achievable primary objective.

2.2 Environment as Integrating Concept?

It seems appropriate and logically consistent for any person or organisation professing to support environmental or ecological principles to also support and advocate a comprehensive approach to policy making. 'Environmentalism', whether based on humanistic, spiritual, aesthetic, or other grounds, invariably demands that a holistic or encompassing view be taken, rather than a sectoral or reductionist approach. The more diverse and disparate the institutions, processes and purpose(s) of environmental (or any other) policy making, the greater the likelihood that the policy outcomes will not adequately resolve or prevent environmental degradation. It has been noted that there is a danger inherent in fixing more or less arbitrary boundaries, that is

:...to solve one problem by focusing on a few variables while unknowingly creating others - and hence, each new solution becomes a new problem that requires still another remedy. Frequently in ecological issues the end result of these iterative fixes may be worse than the original condition" (Bartlett 1990:243).

It was proposed more than three decades ago that the use of 'environment' as a generic concept would indicate, if not indeed dictate, a more comprehensive and integrated approach to social, economic and political problems (Caldwell 1963). Recognition of the need for a less fragmented approach to problem solving remains a recurrent theme to the present day, for example

"...a communications gap has kept environmental, population, and development assistance groups apart for too long, preventing us from being aware of our common interest and realising our common power. We now know that what unites

us is vastly more important than what divides us...none of these fundamental [environmental] problems can be successfully addressed in isolation" (World Commission on Environment and Development 1987:45)

2.3 Comprehensiveness:

Guruswamy (1991:83) has described three ways in which existing environmental laws, policies and institutions have contributed to the fragmentation of the decision making process. While his discussion of, and advocacy for, integrated environmental control (IEC) is related specifically to the United States, the findings may be readily generalised to other polities.

Firstly, environmental law and policy has for the most part treated the environment as a `collection of parts', rather than a unitary and indivisible whole. From this has emerged separate policies and agencies dealing with the use and control of water, air, land, energy, flora and fauna, ignoring or dismissing as unimportant the obvious relationships between these resources or phenomena. For example, heavy applications of fertiliser to agricultural land may promote pasture growth, but at the cost of an excessive nutrient load entering freshwater bodies and accelerating the process of eutrophication. Likewise, it has often been the case that responses to the pollution of some environmental media by industry have resulted in the problem being `displaced' or `exported' rather than solved (Dryzek 1987:16).

Secondly, government departments or institutions with a mandate to protect or preserve environmental values or natural resources have typically had little or no influence over, or input into, social, economic or development policy. Incentives in the form of subsidies, tax breaks, or tenure arrangements, encouraging farmers to utilise and develop 'marginal lands', may have made some contribution to production and so economic growth in the short term. It also had the effect of endangering erosion control measures and valuable wetland. All too often natural resource 'inputs', and the environment's waste assimilating capacity, have been treated as free goods, and so not included in calculations of the economic viability of an activity.

Finally, environmental policy has tended to focus on 'effect' rather than 'cause' -

"...environmental considerations are not considered ex ante but relegated to ex post determinations by comparatively powerless environmental agencies with narrow mandates and restrictively defined remits" (Guruswamy 1991:84).

The emphasis has been on attempts to remedy outcomes such as air or water pollution, often by the development of more elaborate and extensive technical solutions. Less time has been spent considering what social or economic needs or interests are being served by the processes or activities that cause such pollution. Integration of an environmental perspective at the early stage of all public policy making may facilitate `anticipatory' or preventative rather than remedial action (Buhrs and Bartlett 1993:3-6).

A <u>comprehensive</u> approach then may be characterised as one that perceives the reality of the links between media (land, water and air), and recognises the `connectedness' of ecological, social, and economic systems - the ways in which decisions and actions in one sphere have (all too often unintended) outcomes in another.

While some quite robust arguments may be put forward in terms of the need for, and benefits of, a more comprehensive approach to policy making, the idea is clearly not without difficulties. Opponents might insist that comprehensiveness in the policy process would require perfect knowledge, perfect judgement, and total objectivity, mirroring the arguments and issues raised by Lindblom (1959) in his criticism of the 'rational-comprehensive' model. Even if it were conceptually or theoretically possible to identify and consider every conceivable 'input' or 'outcome' of a policy process or proposal, it is unlikely that many individuals or organisations would have the resources or motivation to do so.

Also, the concept of comprehensiveness is arguably too abstract and subtle to readily excite public imagination, or the enthusiasm of politicians busily reacting to more pressing 'real' problems, and preoccupied with finding 'solutions' to them. "Rarely is there a clear constituency for comprehensive decision making either within government or outside it" (Bartlett 1990 242). Environmental problem-solving is often perceived to be a task appropriate for specialists from quite narrowly prescribed scientific or technical disciplines. Environmental problems or issues are frequently perceived through a theoretical matrix grounded in economic, political, bureaucratic, or academic rationality. "Few people by training, experience or predilection are prepared to engage in or promote comprehensive environmental decision making" (ibid:242).

Advocating comprehensiveness might conceivably be interpreted as supporting the modernist view that all things are ultimately comprehensible and so controllable, if only the right administrative or technological 'fix' can be found.

The point must also be made that there is often an assumed causal relationship between a comprehensive approach to solving environmental problems and outcomes that contribute to environmental quality. It is wholly conceivable, however, that decision makers might consider 'all' the factors and implications of a given issue, and yet propose a course of action that is not 'ecologically rational' - the criteria of choice, values system, or institutional biases underlying a decision process might be such that environmental considerations remain subordinate to some other (ibid:249). Nevertheless, a more comprehensive, integrated approach to policy must serve to broaden the context within which decisions are made and implemented. The involvement of individuals and agencies possessing a range of perspectives, objectives, and knowledge should at least ensure that the environmental implications of a given policy will be explicitly discussed and considered in the course of the policy process. A decision to sacrifice or compromise ecological values, in deference to economic or other rationality, should then be exposed and so subject to public response. If policy making from a narrow, `non-comprehensive' perspective is allowed to go unchallenged, it will remain the norm. The adoption of a more comprehensive approach may not of itself resolve environmental problems, but will serve to better prescribe such problems and bring them onto public and political agendas.

Despite the attitudinal, institutional, practical and theoretical difficulties and hindrances associated with the comprehensive approach, the idea need not be abandoned. Even a limited or partial public response or political commitment to the concept could be (and in many instances has been) beneficial:

"...co-ordination, comprehensiveness and integration are far from absolute, all or nothing concepts...there is significant scope for coping with environmental

problems more effectively if policies are developed and implemented with a greater degree of comprehensiveness, integration, and co-ordination" (Buhrs and Bartlett 1993:138).

2.4 Integration:

The word integration carries with it a sense of bringing together parts to make some whole, of joining to make complete (Concise Oxford Dictionary 5th Edition). In terms of public policy this may be expressed in (at least) two ways - by combining policies, or by combining agencies and/or processes.

2.4.1 Integrating Policies

Policy in general, and public policy in particular, is far from being a 'self-defining phenomenon' - it is rather a concept that may be subject to a range of interpretations. Heclo (1972) has proposed four characteristics of policy that are common to many definitions. These are:

- (i) that policy applies to more than single decisions, but to less than major movements or phenomena, so is a 'middle range' concept
- (ii) that policy is 'purposive', and encompasses not only decision(s) but also a course of action (or indeed inaction) intended to accomplish some end
- (iii) policy should at least indicate some means of implementation, unless it is merely symbolic
- (iv) policy is a dynamic, fluid process, that may change as a result of formal decision, or by less overt means, especially during implementation.

A useful working definition of policy then may describe it as " a dynamic network of decisions and actions (including non-action) reflecting the intention(s) of (a) particular actor(s). <u>Public</u> policy refers to policy adopted by a local, regional, or national government (Buhrs 1993)

A feature of much of the literature in regard to combining policies is an apparent enthusiasm for integrating environmental and economic policies, by incorporating environmental perspectives or concerns into the policy process. A closer reading, however, would indicate that what is most often proposed or sought is some means of reducing or limiting negative impacts on the environment, but without going to the extent of challenging economic orthodoxy (e.g. Galvin 1991; OECD 1993). More robust attempts to include environmental costs into economic calculations have been trialled in countries as diverse as Norway, Japan and Canada, but support for application of the `full cost principle' remains far outside the economic mainstream (Tietenberg 1992:615).

The Dutch Minister for the Environment introduced a 'National Environmental Policy Plan' to the government of the Nederlands in 1989, a plan based on "...a well documented analysis of environmental problems, in which a clear insight is given into the causes of environmental disruption" (Ven Der Straaten 1992:58). The plan has been criticised, however, as being normative rather than positive, and in any case is resisted by the powerful Ministries of Economic Affairs, Transport, Finance and Agriculture (ibid:68).

To integrate environmental with other 'hard' policy sectors, for example transport or energy, is also problematic, not least of all for governments. Energy policy may, for example, be aimed at meeting

a projected increase in demand stimulated by economic growth. Such a policy focus is likely to be incompatible with environmentally based concerns for resource conservation or pollution reduction.

It can be argued that economic, transport, energy, agricultural and other policies have such profound environmental consequences that they are indeed de facto environmental policies (Bartlett 1990:248). There is as yet, however, little evidence of such a perspective gaining salience. As concern for the environment has rapidly gained the status of a 'motherhood' concept, it has become politically expedient to spread an environmental veneer over other policy statements, and perhaps even to put in place some substantive limits to environmental degradation. To put environmental considerations on an equal footing within an integrated policy package, however, would demand considerable commitment from a government. For example the economic, social and political costs of an 'environmentally friendly' transport policy might be considerable, whereas the immediate, tangible benefits may be much less evident. For at least as long as promoting economic growth is deemed to be a priority for the State, growth and development may be expected to take priority over environmental protection.

2.4.2 Integrating Agencies

Institutional barriers hinder the promotion of integration in the sense of combining agencies, the forming of larger, more powerful organisations with mandate(s) or responsibilities formerly held by several smaller groups. For example, government departments may continually seek to justify their existence, to jealously guard their own `turf', their information, knowledge, or area of responsibility and influence. To this extent,

"each policy sector...exists in a jurisdictional shelter of organisational structures, where actors develop their partial perspectives and where specialised relationships of support and opposition develop connecting bureaucratic, professional and outside interests in distinct arenas of sectoral policy" (Benson 1982 and Painter 1980, cited in Painter 1987:12).

This sectoralism may have been further encouraged in the light of the institutional reforms that have occurred in Aotearoa/New Zealand since 1984, enhanced by the ideological stance that underpinned those reforms. In keeping with the New Right perceptions of such virtues as efficiency and accountability, departments were restructured to more closely resemble models of corporate or business organisations, and to reflect values appropriate to those models. An instance of this may be seen in the 'ownership' of geographical or topographical information. The Department of Lands and Survey, as an arm of the 'old' public service, made such information readily available, with at most a nominal charge made for copying. The newly emerged DOSLI, by comparison, took the view that data has a considerable commercial value, and charges for it according to some (not always well explicated) criteria involving number of items of data, its potential usefulness, and its appropriability (Barringer 1994 pers. comm.).

Criticisms of proposals for integrated policy making are often based on an `absolutist' interpretation of these words - `including everything' or `fully incorporated into an indivisible whole' (Buhrs and Bartlett 1993:138). Such interpretations might certainly lead to the (il)logical conclusion that environmental policy could only be made or implemented by either Passmore's `ecologist-kings', or by the creation of some omnipotent `superministry'. A less extreme interpretation might still anticipate the emergence of a strong central agency with considerable power and responsibility.

For both political and organisational reasons, however, such a 'solution' is unlikely to become a reality. It would be necessary to restructure much of the existing machinery of government, changing the power relationships both within and between departments. Actearoa/New Zealand experienced a 'legal revolution' in the last decade - 'legal' in the sense that the law is the dominant mode in which the state acts (Sharp 1994) - and to call for another radical departure from (what remains of) tradition would be to demand a great deal. The period of transition to a new electoral system would also seem a scarcely propitious time for any bold new innovations in institutional arrangements.

History would indicate that in any case a very large organisation or department with a mandate to generate outputs that integrate environmental, social, economic and other objectives and values would stretch the fabric of an inter- or multi- disciplinary approach to (or indeed beyond) breaking point. The department could well find itself reduced to an unproductive collection of disparate parts, 'integrated' in name only, and in practice as fragmented by specialisation and riven by conflicting interests as the discrete agencies it replaced. This was certainly the outcome of the British government's attempt in the 1970s to amalgamate three ministries - Housing and Local Government; Transport; and Public Buildings and Works - into one giant Department of the Environment (Painter 1980)

The establishment of monolithic agencies with wide ranging powers is also anathema to groups and individuals at almost any point on the political spectrum. Free market neo-liberals, social democrats, Greens of every shade, are all (for very different reasons) committed to less or smaller government, not more. The language of liberal democracy in the 1990s speaks of decentralisation

and devolution, not of consolidation or amalgamation. The latter might all too quickly be seen as synonymous with comprehensiveness or integration.

Integration might also be associated with the shortcomings of organisational forms such as the erstwhile New Zealand Forest Service. The Forest Service was obliged to balance a number of (conflicting) mandates, values and roles, from commercial timber production to forest conservation. Recognition of the difficulties inherent in fulfilling so many roles led to the redistribution of responsibilities and mandates to newly formed entities such as DoC and ForestCorp/Timberlands.

2.4.3 Integrating Processes

The policy process may be integrated in a variety of ways. Conceptually, policy may best be expressed as a cycle - from problem identification, through implementation, to evaluation and review, and so to the refinement and recognition of `new' problems perceived to require attention. Agencies may be obliged to interact in the policy process by establishing some interdependence, by making the achievement of one agency's goals or objectives contingent upon input of knowledge, expertise, or approval from another agency. Procedural integration may be demanded and regulated by an agency assigned this task, such as the Council on Environmental Quality established in the United States under the National Environmental Policy Act of 1979 (Molnar and Rogers 1982). This strategy was not conspicuously successful, however, due to the complexity of many issues, the number (and often the power) of agencies involved, and the relatively sparse resources allocated to the Council (ibid). Similarly in the New Zealand context, the `reporting function' of the Ministry for the Environment was intended to ensure that departmental proposals having important environmental impacts would be subject to scrutiny before being presented to Cabinet. Lack of resources and regulatory authority assigned to the Ministry, and the countervailing weight of the

Treasury, has prevented this reporting function from achieving anywhere near its full potential as a mechanism for process integration.

2.5 Coordination

At this point the value of pursuing better coordination, rather than the larger (but practically more difficult) goal of integration, may become more evident. Better coordination of agencies, within the context of existing institutions, may fall within the gambit of `creative third alternatives'. These contribute to changing the nature of the administrative state

"...from within - gradually and not entirely predictably - while remaking individual values and patterns of thinking and acting and, perhaps, while promoting the preconditions for more substantial institutional innovations" (Bartlett 1990[b]:82)

Coordination is a term that in common usage carries some notion of `harmonious combination' of effort or activity, of cooperating or working together in some positive way. It has been described as one of the `golden words', seldom used to imply disapproval, yet by no means unambiguous (Wildavsky 1979:131). Within the context of public policy it has been called `a word raising more difficult problems of definition than any other' (Seidman and Gilmour, cited in Buhrs 1991(a)).

The following section will discuss certain conceptions and models of coordination, which will be utilised in reference to both positive and normative analysis of coastal management. It will be argued that better coordination of the agencies with powers or responsibilities is a realistic and feasible approach to promoting integrated management.

2.6 Models of Coordination

Coordination may be conceptualised in a number of different forms which may, it is claimed, be subsumed into four models (Minnery 1988:255). The models are recognised as being 'ideal types' or simplified descriptions, unlikely to be exactly replicated in reality. In focusing on essential elements and characteristics, however, the models provide a useful framework for the analysis of real world structures and processes.

The models identified by Minnery are coordination by hierarchical control; the use of power; mutual adjustment; and common purpose.

"Coordination by hierarchical control occurs when an agency is endowed with the legitimate power (authority) to issue and enforce orders. Coordination by power takes place when an agency imposes its will on others, even though it lacks the legitimacy to do so. Coordination by mutual adjustment happens when actors decide and act whilst taking into account the decisions and actions of others. Coordination by common goals occurs when policies are made and implemented on the basis of goals or principles shared by all those involved in a policy area" (Buhrs 1991(b):3).

The first three models as listed above, not requiring common goals, may be further classified as 'procedural'. The fourth, which emphasises the need for common purpose(s), has been referred to as the 'substantive' approach to coordination (ibid). Following is some discussion of the characteristics of each model. Figure 1 further summarises the main features of the four models, in terms of their structure, processes, outcomes and associated values.

2.7 Characteristics of the Models

2.7.1 Coordination by Hierarchical Control

This model is premised on the concept of the legitimate exercise of power (authority) by a central controlling agent. It is a 'top down' model, with a decision maker at the apex who may be informed and even advised by those occupying lower levels of the structure, but who ultimately makes the decisions and directs all actions. It is assumed that the decision maker is rational, objective, and guided by some clearly defined goal(s) and value system, and that these goals and values will guide the process. Centralisation is perceived to contribute to efficiency, both in process and outcomes, through the elimination of duplication or gaps in the process, and in ensuring that tasks are completed on time and in the correct order. This model reflects the 'classic bureaucratic hierarchy of superior and subordinate specialised offices' (Minnery 1988:255), and reinforces a tendency to treat coordination and control as virtually synonymous.

For this model to function in anything resembling its 'pure' form, a number of criteria would need to be met. The controlling agency would need to have a mandate that clearly and unequivocally states (and so legitimates) its authority and place at the top of the hierarchy, without overly threatening or contradicting the mission statements of the subordinate agencies. Any ambiguity or doubt would create a disincentive for 'lesser' agencies to lend their active and willingly support and cooperation. The right of the central agency to coordinate by way of a chain of command would need to be upheld with sufficient (probably considerable) resources to fully exercise such right. The model further assumes that adequate knowledge or information is available, and is able to be processed, to enable the 'best' decision to be made.

2.7.2 The Use of Power

This model recognises the possibility that power may be exercised that is not entirely legitimate, or at least is not perceived to be so by the 'recipient'. Some greater or lesser degree of coercion is assumed. Sources of the power to coordinate may include control of information, some special expertise, or the ability to reinterpret enabling legislation. Power is likely to be exerted by informal, covert means rather than through a more formal and visible structure or process. Given that the exercise is likely to reflect and serve the values and interests of the coordinating agent, the costs associated with compliance are likely to be high, as the agencies being coordinated have no strong incentive to more than a minimal level of cooperation.

Relying as it does on a degree of coercion, and the exercise of power that is not legitimate, the use of power is likely to generate considerable opposition and resistance, threatening its stability. It is clearly at odds with the stated ideals of a liberal, participatory democracy, and such an arrangement should have little chance of surviving public scrutiny. Contrary to the classical pluralist position, however, the use of power may be seen in the ability of groups within a society to influence agendas and support or veto policies. The business sector, with its privileged place in politics (Lindblom 1977), is one group that enjoys this comparative advantage. The same could seldom be said of environmental advocates and pressure groups.

2.7.3 Mutual Adjustment

This model is closely aligned with the structure and process of the `classic free market', wherein every actor or agency pursues their own ends for their own purposes, and coordinates its activities with others for quite selfish reasons, if at all. `Adjustments' or concessions may be made as a result of some mixture of bargaining, negotiation, persuasion, or even threat or bribery, depending on the

relative power or resources of those involved. This model assumes that the central controlling authority, if any, takes an active interest only to the extent that it is deemed necessary to defend or maintain the mechanisms of exchange and adjustment. More often it is assumed that no such authority is needed. The outcomes of this form of coordination are most unpredictable, due not least of all to the subjective and probably ad hoc nature of the decision making and coordinating processes. It is the least 'structured' of the models, as the process of mutual adjustment occurs as a result of many separate and unrelated instances of bargaining, negotiation, and so on.

This model would seem most in tune with prevailing economic and political wisdom, but perhaps least likely to achieve 'good' environmental outcomes. Incentives to coordinate rely on the perception of gain, or self interest, rather than reasons of altruism or shared recognition of some 'greater good'. The costs associated with coordination are likely to be high, given the need to renegotiate or bargain to meet the needs of every situation that might arise.

2.7.4 Common Purpose

The most active commitment to coordination is likely to come from a recognised convergence or commonality of values, interests and objectives. This is most often associated with crises such as war or natural disaster. Typically it involves a tendency to concentrate power in one central coordinating body, assuming this to be the most efficient means of achieving the common goal. If acceptance of a common purpose is less than wholehearted to begin with, or wavers over time, the mechanism of coordination may take on aspects of coercion and control.

Recognition by a number of agencies that they share a common purpose or goal would serve to overcome many of the problems and shortcomings associated with the other models. Such sharing

provides adequate incentive and stability, and minimises the level of resistance and so the need to monitor compliance. Sadly, the range and complexity of demands placed on contemporary public policy agencies, and the diversity of interests they are obliged to represent or at least placate, would seem to preclude the possibility of such common purpose emerging. Environmental issues and problems have certainly provided a rallying point for the 'environmental movement'. Goodin (1992) however illustrates that it is easier to generalise about this 'movement' than to explicate shared goals or common purposes within it. It is harder still to instil a sense of common purpose when even a nominal commitment to a readily identifiable 'cause' is absent.

Figure 1: The Four Models of Coordination

	Hierarchical Control	Use of Power	Mutual Adjustment	Common Purpose
Structure	*hierarchy of offices *centralised	*centralised or clustered	*decentralised *partisans	*variable, probably centralised
Processes	*legitimate power *chain of command	*coercion *sources of power	*adjustment (economic) *adjustment (incremental)	*probably legal power
Outcomes	*unity of direction *efficiency	*as directed *reaction *costs	*market efficiency *incremental change	*rapid action *single purpose
Values	*rationality *efficiency *legitimacy *neutrality	*those of coordinator	*market *partisans	*common purpose *specific achievement

Source: Minnery 1988:260

2.8 Conclusion

This paper so far has discussed the nature of the coastal environment, and indicated that certain characteristics of it must be recognised and considered if the resource is to be sustainably managed. In particular, it is noted that the coastal environment is physically, ecologically and culturally linked to 'other' environments, and that management of human uses of the resource should likewise be integrated. History demonstrates that fragmented or 'non-integrated' management can result in poorly planned and inappropriate development, with high social, economic and environmental costs.

However, substantial barriers exist to establishing a comprehensive or integrated approach to environmental management. A comprehensive approach to environmental policy cannot be imposed, but can at best be encouraged to evolve in both the public and political spheres. Integration is most often perceived to demand substantial reform of public and private institutions and processes.

The social and political landscape of Aotearoa/New Zealand has been substantially reformed within the last decade, and an element of integration has certainly been achieved. The immediate future is more likely to be characterised by consolidation and the implementation of changes already made, rather than radical new departures. Therefore the degree of comprehensiveness and integration already achieved is likely to remain as the `upper limit' for some time to come. Further progress must rely on better coordination (by whatever means) of responsible agencies, a strategy that is possible within the constraints imposed, while offering immediate as well as longer term environmental benefits.

With this general hypothesis in mind, the legislation prescribing coastal management will now be reviewed. Integrative mechanisms within the legislation will be highlighted, as will areas where 'non-integration' does or may occur.

3.1 Introduction

The Resource Management Act 1991 (RMA) is the single most important piece of legislation in regard to the management of New Zealand's coastline. Also significant are the Conservation Act 1987, the Fisheries Act 1983, The Treaty of Waitangi Act 1975, and a number of lesser pieces of legislation that are identified below. The 'major players' then in respect to managing the coastal marine environment are the Ministry for the Environment (MfE); the Department of Conservation (DoC); the Ministry for Agriculture and Fisheries (MAF); territorial local authorities (especially by way of their powers, duties and functions under the RMA); and iwi Maori.

3.2 Historical Background

It has been proposed that the management of New Zealand's coastline and marine resources since European settlement has been so poor as to warrant the handing over of responsibility and control to the earlier 'managers', the iwi Maori (Montgomery 1990:77). It is further noted that the notion of managing the coastal environment as a distinct entity has arisen in relatively recent times as far as Pakeha are concerned (ibid). Even a brief survey of the relevant literature reveals that coastal and marine management has not traditionally been on par with terrestrial management either in scope of understanding, coherence, or quality of outcomes (Hilton 1992), - recognising meanwhile that terrestrial management has not always set an especially high standard for comparison!

A significant feature of coastal management has been the sheer quantity of legislation and number of responsible agencies (see figure 2). As recently as 1987 it was observed that

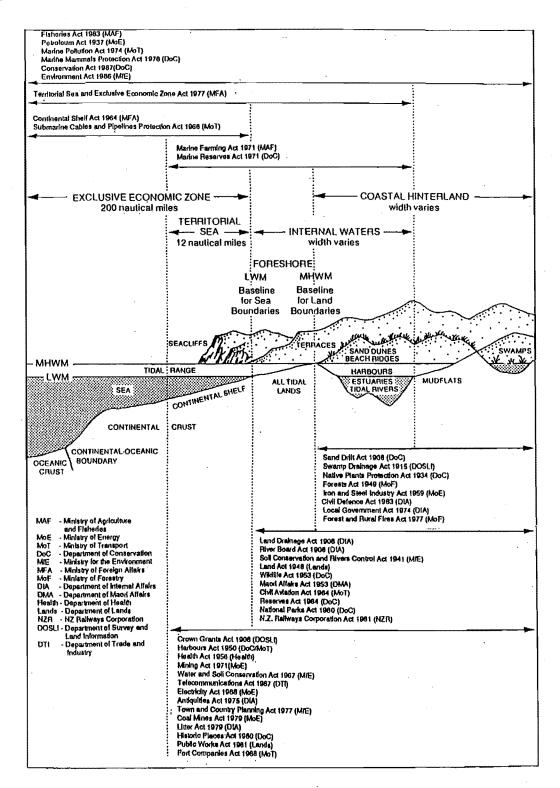
"...42 Acts of Parliament have jurisdiction over land and sea boundaries. Such a situation makes for administrative fragmentation, duplication, political competition and gamesmanship ...and occasionally leads to uncertainties of jurisdiction. Also, it is not common for the administrative boundaries of authorities to coincide with natural boundaries along the coast, so that it is possible for the policies and actions of one authority to have adverse environmental impact on the jurisdiction of a neighbour" (Kirk 1987:244)

This legislative confusion has been compounded by a lack of knowledge or understanding of the coastal environment, as discussed in section 1.3.

The nature of coastal property rights is much more ambiguous than in most land-based situations.

"A single entity, the Crown, has been the dominant resource owner and this could have been expected to facilitate integrated and holistic planning. However, the variety of values and demands placed on the resource by the largely ill-informed shareholders, the public, have been substantial. Our management of human interactions with the coastal environment, arguably, has been far more piecemeal than that of the terrestrial equivalent "(Rennie 1993:152).

Figure 2



The Jurisdiction of Acts of Parliament over Land and Sea Boundaries, Territories and Zones Around the Coastline of New Zealand.

The fragmentation of jurisdiction over the coastal zone created conditions conducive to reactive rather than proactive management; generated inter-agency and intra-agency competition for authority to manage and for resources; and led to uncertainty as to the objectives or future direction of management. For at least two decades prior to 1991, these problems and shortcomings associated with coastal management were recognised and debated. This debate was motivated in part by the increased pressure on the coastal resource, particularly from urban development associated with improvements in the country's standard of living and increased mobility during the sixties and early seventies (Morton et al 1973). Popular seaside resorts close to major cities experienced a considerable rise in year round populations, as holiday 'baches' were upgraded to permanent homes. Commercial developments such as extensions of port facilities and construction of marinas was also evident during this time.

3.3 The Reform Process

The reform of resource management law followed closely behind fundamental changes in the institutions and processes of both national and local government. The dual reforms were linked in many ways that need not be addressed here, except to note that the number of agencies and empowering statutes having some impact on the coast was very much reduced.

As the 'inheritor' of a number of responsibilities and functions, such as those outlined in the (amended) Harbours Act, and the Marine Reserves Act, the newly established Department of Conservation was given a mandate in 1987 to undertake a review of the coastal legislation. DoC saw the main objective of the Coastal Legislation Review as the protection of the natural qualities and intrinsic values of the coastline, and anticipated a separate coastal statute based on this premise

(Memon 1993:101). This emphasis was in marked contrast to the more common focus of coastal management at that time, which had become preoccupied with 'hazard' in the coastal zone. Associated with this was a reliance on erosion control by structural engineering schemes; the according of a high priority to private property rights; and a tendency to equate public good with development and protection of privately owned assets on the coast (Kirk 1987:256).

In September 1988, in spite of objections from DoC, the Government broadened the scope of the Resource Management Law Reform (RMLR) process to specifically include consideration of coastal legislation. DoC's misgivings were based on fears that coastal protection would suffer as a result of the 'free market' influences perceived within the Core Group overseeing the RMLR process, and by a concern that coastal planning might devolve entirely to regional councils. The particular prominence given to coastal planning in the RMA² may be seen as an outcome of at least two factors - a political decision reflecting the strong national interest in the conservation values of the coast; and the input of DoC into the review process, aimed at ensuring the RMA made provision for recognising and protecting these values (Memon 1993:101).

Two aspects of coastal management that were excluded were resource ownership and fisheries management. The Coastal Working Party (CWP) did identify a need for the RMLR process 'to draw clear distinctions on aspects to be governed by the fisheries legislation and those to be dealt with by devolved resource management law' (MfE 1988:35).

² For example, the RMA (s.57) states that `there shall at all times be at least one New Zealand coastal policy statement' - the Minister may, if s/he deems it desirable, prepare statement relevant to other resources.

3.4 Reform Options

A recurrent theme of the CWP's report was the need for more integrated (ie less fragmented) management of the coastal zone. The group proposed three options or models for reform of coastal administration (ibid:Chap. 5). These were general devolution, national management, and integrated national and regional management. Each of the models reflects to some extent the assumption underlying much of the debate around the RMLR, that attention to the structure and processes of policy making and implementation would ensure 'good' outcomes. These proposals were made within a broader context, an attempt by the government 'to improve environmental policy primarily through reform of organisational structures and policy processes' (Buhrs and Bartlett 1993:132).

(i) General Devolution

This option was characterised by integrated planning, licensing and the management of external effects at a regional level. This model was seen to offer a high level of integration and consistency in resource use decisions, eliminating boundary problems across the mean high water mark, but potentially giving rise to problems with boundaries along the coast, that is across regional boundaries. National conservation values were seen to be at risk in this scenario.

(ii) National Coastal Management

This model called for integrated planning, licensing and the management of external effects, based on a national administration. While offering maximum integration and consistency and eliminating boundaries along the coast, it created some overlap of jurisdiction on land adjoining the coastal zone. Some concern was expressed that local or regional interests could be overlooked.

(iii) Integrated National and Regional Management

Under this proposal regional planning schemes are extended to coasts; coastal conservation is accorded a higher priority and strengthened; and some Crown licensing is retained to central government. This approach was seen to offer the greatest degree of flexibility while still achieving a reasonable level of integration. While reducing (but not eliminating) boundary problems, it allowed for a balancing of national conservation and regional use interests, at some cost in terms of more administrative complexity.

3.5 Outcomes of the Reform Process

The outline that follows of the RMA's provisions for coastal management indicates that the final outcome most nearly reflected the latter of the three models proposed above - the integrated national and regional management model. This will set the scene for some enquiry as to whether the 'structures and processes' of the Act have been translated or implemented in a way that assures better integrated, and so more sustainable, management of the coast, or whether more is required at this practical level.

3.6 Resource Management Act 1991

The passing of the RMA established a hierarchy for planning and management of natural resources in New Zealand. At the apex sits the Act itself, with its singular purpose being 'to promote the sustainable development of natural and physical resources' (RMA s.5). Section 6 states that in achieving the purpose of the Act, all persons exercising powers and functions under it must recognise and provide for matters of national importance. These include the preservation of the

natural character of the coastal environment, the maintenance and enhancement of access to and along the coastal marine area, and the relationship of Maori with their ancestral land, waters, and taonga.

The Act provides for extensive public participation in the preparation and review of the various levels of statements and plans. `Any person' may make a submission about an application for a resource consent. The requirement, common to earlier legislation, that only those with `standing' or significant interest in an application may make submission is absent (RMA s.96).

The Act also requires the preparation of national policy statements, which are intended to state policies on matters of national significance relevant to achieving the Act's purpose (RMA s.45). National policy statements can cover any range of issues, and all subsequent planning instruments 'must not be inconsistent' with them. The coastal policy statement (NZCPS) is the only national statement that is mandatory, its purpose being "...to state policies in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand" (RMA s.56).

Reference is made to the `coastal environment' throughout the Act (e.g. s.6, s.58, s.64). No clear definition of it is offered, except that it includes (but is more than) the coastal marine area. The RMA defines the coastal marine area as

"...the foreshore, seabed and coastal water, and the air space above the water - (a) of which the seaward boundary is the outer limits of the territorial sea (b) of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is

the lesser of - (i) one kilometre upstream from the mouth of the river; or (ii) the point upstream that is calculated by multiplying the width of the river mouth by 5 " (RMA s.2)

The Draft Coastal Policy Statement 1992 offered a `new' definition of the `coastal environment' (DoC 1992:5), but the appropriateness of this was disputed by the Board of Enquiry, who restated the definition arrived at in decisions of the planning tribunal made under the previous legislation.

The Board found that

"...a `coastal environment' is simply an environment (surroundings) in which the coast is a significant element or part, but because of section 6(a), it now specifically includes all of the coastal marine area" (DoC 1994:15).

Each region must develop a regional policy statement that both picks up the requirements of the Act, and is `not inconsistent' with the NZCPS. Beneath the regional policy statement each region is required to develop a regional coastal plan ³. The lower level in this planning hierarchy is the district plan, to be written by district councils, and which again must not be inconsistent with the NZCPS or other policies or plans of a higher order.

³ The RMA as passed in 1991 called for one regional coastal plan - the amended Act makes it possible to have more than one regional coastal plan, provided the whole region is covered.

3.6.1 Minister and Department of Conservation

As well as being responsible for the production of the NZCPS, the Minister of Conservation also has the role of approving regional coastal plans. The Minister has the power to require amendments to such plans prior to approval being given. The Minister, through DoC, may identify areas of significant conservation value (ASCV). The Minister is also empowered to make decisions on applications for coastal permits (i.e resource consents to undertake an activity in the coastal marine area), in relation to restricted coastal activities (see below); to monitor the effect and implementation of the NZCPS and coastal permits; and to demand from regional councils information related to monitoring by the regional councils of coastal permits granted, and of regional coastal plans.

Restricted coastal activities (RCA) are those activities specified by the Minister as being likely to have significant or irreversible adverse effect on the coastal marine area, or to occur in an area of significant conservation value. Restricted coastal activities listed in the NZCPS include most reclamations, large structures and sea walls, mining, large scale dredging and dumping, sewage discharges, and activities that exclude public access, such as large scale marine farming.

3.6.2 Minister and Ministry for the Environment

The Minister is responsible for monitoring the effects and implementation of the RMA, and has the ability to 'call-in' projects of national significance

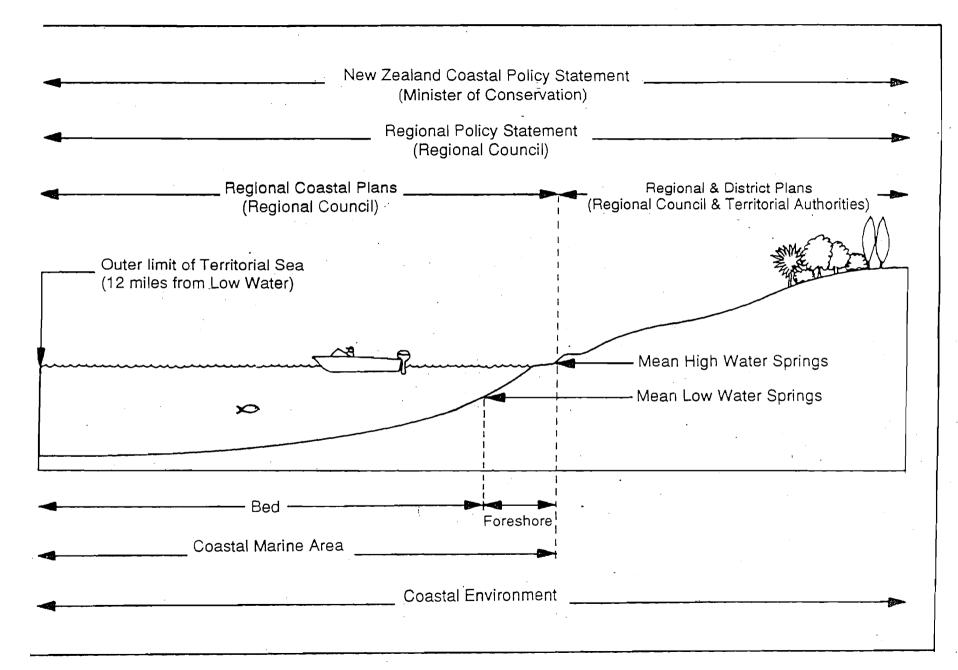
3.6.3 Role of Regional Councils

In the coastal marine area, the regional council controls (in conjunction with the minister) land and associated natural and physical resources; the occupation of space on Crown land, or land vested in

the regional council; and the extraction of sand, shingle, or other natural material. The regional council's responsibilities also include regulating discharges onto land, into air or water, avoidance or mitigation of natural hazards, and activities in relation to the surface of the water.

3.6.4 Role of District Councils

District councils are required to provide district plans for their area of jurisdiction, including all of the coastal marine environment above mean high water mark. District plans must not be inconsistent with the regional policy statement or plans, or the NZCPS.



3.7 Other Legislation and Agencies in the Coastal Environment

In addition to the role as described in the RMA, the Minister and Department of Conservation has a management role in the coastal environment under a range of Acts, including

- (i) The Marine Reserves Act 1971
- (ii) The Marine Mammals Protection Act 1978
- (iii) The Conservation Act 1987
- (iv) The Wildlife Act 1953

The first two of these in particular have potential to cause conflict in respect of DoC's jurisdiction over given areas vis-a-vis that of the regional and district council(s).

3.7.1 The Minister and Ministry of Agriculture and Fisheries (MAF)

MAF has a statutory role under the Fisheries Act 1983 to manage and conserve fisheries and fishery resources within New Zealand's waters. This Act defines fishery resources as including all aquatic flora and fauna. MAF's role and responsibilities in respect to aquaculture have changed as a consequence of the enactment of the RMA, and associated amendments to the Marine Farming Act 1971 and Fisheries Act 1983. Regional councils now have responsibility for approving and managing the effects of new marine farming ventures where these involve 'exclusive occupation' of space or structures in the coastal marine area. Marine farms still require a permit under the Fisheries Act to take spat and to possess and harvest farmed fish. The Ministry also controls harvesting or enhancement of populations of aquatic organisms.

3.7.2 The Minister and Ministry of Transport (MOT)

Under the Harbours Act 1950 (as amended) the Maritime Safety Authority has power delegated to it from the MOT to oversee navigation, safety, and the standards of vessels operating commercially. The Maritime Safety Authority is also responsible for administering Water Recreational Regulations on waters not covered by harbour board bylaws, and has some responsibilities for marine pollution under the Marine Pollution Act 1974. The latter Act also gives regional councils responsibility for preparing Oil Spill Control Contingency Plans.

3.8 Discussion

3.8.1. The RMA and Comprehensiveness

The Resource Management Act addresses the more common shortcomings of environmental law that are identified by Guruswamy (1991). The Act (S.2) defines `natural and physical resources' as including land, air, water, energy, fauna and flora. This definition requires an inclusive approach to management, and should help eliminate the `displacing' or exporting of pollution and other negative environmental impacts from one environmental media to another. Section 5 links management of these natural and physical resources with consideration of the social, economic, and cultural wellbeing of individuals and communities, both now and in the future. It allows for extensive input by interested groups and individuals into the policy process. Accordingly it reflects some of the significant characteristics of comprehensiveness.

3.8.2. The RMA and Policy Integration

By establishing a (relatively) clear hierarchy of policy statements and plans, the RMA imposes a high degree of uniformity and consistency in management of the coastal environment. The NZCPS establishes both general principles and national priorities for coastal management. It identifies certain matters that must be included in regional coastal plans, and gives clear guidance in other areas. These directives should also be reflected in district plans. The Minister of Conservation retains considerable powers under section 58 to oversee and control coastal activities and development. To some extent then the RMA integrates coastal policy nationally in a way that would satisfy some of the critics of previous arrangements. Integration with other policy sectors, notably fisheries and transport, is less evident. Agencies may be burdened with certain responsibilities but lack concomitant powers to influence or control relevant activities (eg regional councils in respect of pollution from shipping). Ample opportunity exists for conflict between MAF, DoC and local authorities in terms of balancing use, development and protection, while the harvest and management of aquatic species is wholly separate from management of the water and seabed that supports those species (RMA S.30).

3.8.3 The RMA and Agency Integration

The RMA was enacted within the context of the institutional framework established by the Local Government Act 1989. The local government reform substantially reduced the number of local and regional units of government. "Thirteen regions, seventy-four local districts, and seven special purpose boards were created to replace 625 existing units of local government..." (Buhrs and Bartlett 1993:120). Amongst the bodies disestablished were many catchment authorities, harbour boards and other special purpose boards who previously had some jurisdiction over coastal areas. Far fewer agencies are now involved in coastal management, yet conflict of mandates may be

observed and anticipated both in principle and practice. The Mean High Water Mark remains a line of demarcation between agencies, despite it being "...a cadastral boundary that is irrelevant to the physical functioning of coasts, and which is a poor reference line against which to record and assess historical change in shorelines at time scales appropriate to planning" (Kirk 1992:8). Responsibility for the seabed and foreshore, the water column, and marine biota⁴, is split between three agencies (regional authorities, DoC and MAF respectively).

3.8.4 The RMA and Process Integration

One of the primary instruments of process integration within the Act may be found in the First Schedule Part 1 (3). This demands that in preparing a regional coastal plan a regional authority must consult with the Ministers of Conservation, Transport and Fisheries. In addition, as noted earlier, any person may make submissions during plan preparation, or during the consent application process. The consent process itself is standardised. `All persons' exercising powers and functions under the Act are obliged to be cognisant of the purposes and principles as described in Part 2. Section 32 also requires that as part of the policy process agencies must ` consider alternatives, assess benefits and costs'. In general terms, however, the language and provisions of the Act remain broad and non-prescriptive. It is possible for agencies to exclude others from their processes, except as litigants or appellants.

3.8.5 The RMA and Coordination

Despite the degree of integration that has occurred in respect of coastal management, it remains a 'contested' site. Multiple agencies, each with a somewhat different mandate, may claim a degree of authority over all or part of the coastal environment. The language and provisions of the RMA and

⁴ The exception to this is marine mammals, which are the responsibility of the Department of Conservation.

other Acts associated with the coast are not wholly unambiguous, and so are subject to a range of interpretations. The likelihood of conflict is high, which may prove counterproductive in terms of management. Better coordination of the agencies, beyond that presently required by law, may serve to enhance environmental outcomes. This will be discussed in more depth in the final chapter.

3.9 Conclusion

This chapter has described some of the key features of the RMA and other legislation as it affects coastal management in Aotearoa/New Zealand. The framework described should in principle resolve many of the flaws evident in the past. The national oversight by a central government department should prevent or limit the excesses of local interests, that historically produced some very unsatisfactory developments and practices and imposed unacceptably high social, environmental and financial costs. The Department of Conservation is a body well placed (subject to budgetary constraints) to develop and disseminate knowledge and information about coastal processes. Regional councils have the opportunity to link management of all environmental media, rather than treating land, water and air as discrete entities. The `top-down' or hierarchical structure of the RMA is countered by the opportunities for concerned groups and individuals to be involved in the processes and institutions of management. Fewer agencies are involved, and areas of jurisdiction are better defined. A level integration of policy and process has been achieved. There is still evidence however that coordination, whether `formal' or `informal' could contribute to preferred environmental outcomes.

4.1 Introduction

This chapter will briefly outline certain features of the New Zealand Coastal Policy Statement, as issued by the Minister of Conservation in May of this year (1994). As noted in the previous chapter, lower level statements and plans must not be inconsistent with this document. Extensive description and analysis of the document will not be undertaken - attention will be focused rather on features of the document most relevant to a discussion of integrated management of the coast. The chapter will then introduce and consider a series of interviews that were conducted over the last several months with representatives of the coastal planning section of the Canterbury Regional Council (CRC); the Department of Conservation's (DoC) Christchurch office; and the Ministry of Agriculture and Fisheries (MAF) in Dunedin.⁵

4.2 The New Zealand Coastal Policy Statement

The purpose of the NZCPS, as stated in section 56 of the RMA, is to state policies in order to achieve the purpose of the Act in relation to the coastal environment. The general principles of the NZCPS restate a commitment to all of part two of the Act, noting that section 5 cannot be read in isolation from sections 6 (matters of national importance), section 7 (other matters), and section eight (Treaty of Waitangi). In so doing it reinforces in a general sense the integrative aspects of the Act.

⁵ MAF's representation in Christchurch is limited to a small number of scientific rather than policy staff, whose focus is for the most part on fresh water marine life. Otherwise MAF interests in the South Island and the Chatham Islands are administered from Dunedin.

The NZCPS notes (p.2) that `functionally, certain activities can only be located on the coast or in the coastal marine area', and that these activities can be important socially, economically, and culturally. `Appropriate' allocations of resources and space in the coastal environment are to be made, and priorities established, according to the processes of the Act. It is recognised that "...the protection of habitats [the responsibility of DoC and regional councils] of living marine resources [largely the concern of MAF] contributes to the social, economic and cultural wellbeing of people and communities" (NZCPS:3). The document states a commitment to maintaining the biological and physical processes of the coast in as natural a condition as possible, while recognising their dynamic, complex and interdependent nature. It further states that there is significant potential for adverse effects of activities to spread beyond regional boundaries.

Having established a set of key principles, the Statement then links these to a number of policies. For example, it is deemed a national priority to preserve the natural character of the coast by taking into account the potential effects of subdivision, use or development, 'both within and outside the immediate location', and to avoid 'cumulative adverse effects' (Policy 1.1.1 [b] [c]). Provision must be made for protecting habitats of species that are important for commercial, recreational, traditional or cultural purposes (Policy 3.2.8). Local authorities "...should share information and knowledge gained by them about the coastal environment, particularly where it relates to coastal processes and/or to activities with previously unknown or little known effects" (Policy 3.3.1).

In giving effect to these policies, it is evident that agencies must (i) recognise the connectedness of environmental media, and of the diversity of human values, impacts and demand (ii) implement and so reinforce at least the existing level of agency, policy, and process integration, and

(iii) undertake some measure of inter- and intra-regional coordination, along with involvement and input from central government agencies.

4.2.1 Monitoring the Coast

A ready example of where this coordination might usefully occur is in relation to monitoring of the coastal environment. Both national and regional bodies are obliged to carry out monitoring programmes for at least two important reasons. Long term monitoring of key indicators of the state of the coastal environment is needed to establish and maintain base data, so that fluctuations and changes in environmental quality can be observed and recorded. The effects of management programmes must also be monitored, in order to verify their effectiveness and efficiency in achieving objectives and statutory requirements.

"Although not required in any legislation, there may be advantage for regional councils to have national coordination of monitoring to ensure consistent standard transfer of information and efficient use of monitoring facilities" (Ward 1993:7). Environmental monitoring is a complex and potentially costly task, usually demanding a high level of expertise and technology if a consistent flow of relevant, good quality information is to be assured. DoC and MAF could assist in the provision to regions of a 'monitoring template '(ibid:6), thus contributing to a quality and consistency of monitoring. In return, they would receive back information that would merge into a national picture of the state of the environment. Alternatively, central and regional bodies could continue to run entirely separate programmes. This would clearly involve much duplication of effort, unnecessary commitment of resources, and would make national and inter-regional comparisons of policy performance and environmental quality much more difficult.

4.3 The Canterbury Example

The area of interest is that covered by the CRC Regional Coastal Plan, some 880km of coastline from the northern boundary of the Kaikoura District, to the Waitaki River in the South. Given the limited time and resources available for this project, it was considered impractical to survey the nine territorial authorities within the Canterbury region. Some impression of their involvement in coastal planning matters to date was gained by way of a study of submissions and other correspondence on file at CRC.

Respondents were asked a number of questions aimed at eliciting some evidence as to the nature and degree of interaction between agencies, and their perceptions as to the motivating influences underlying such interaction. The advice and information gained is clearly quite subjective - a more rigorous, empirically grounded investigation might have been preferred in terms of providing 'harder' evidence, but such an approach was countermanded by the newness of the situation, and the lack of 'history' available under the post-reform framework. The discussions were not wholly without focus however - for example the preparation of the regional coastal plan, and the (ongoing) process of a fisheries management plan for the Banks Peninsula area were discussed as practical examples relevant to the topic.

4.4 Canterbury Regional Council and...

4.4.1 DoC

The CRC actively sought the involvement of DoC, the affected territorial local authorities, and MAF, in the process of writing a regional coastal plan. These groups were consulted, at least in

part, as a matter of necessity - they are all `1st Schedule Consultees' under the provisions of the RMA. The participation of DoC seems to have gone far beyond that demanded by the legislation. At the height of the exercise there was contact between Doc and CRC staff virtually on a daily basis, with the Council coastal planning committee, made up of both staff and councillors, also having regular contact with DoC. Some tension was created over the matter of the areas of significant conservation value nominated by DoC as requiring the special protection of the Minister, and so to some extent removed from the regional council's control. DoC and CRC are obliged to have an on-going relationship, both in terms of the further development of the plan and for matters including coastal permits and consent applications generally. Staff from both organisations indicate positive support and expectations for this necessary interaction, but have no plans or apparent interest in initiating more regular non-specific contacts.

As outlined above, DoC was actively involved in the preparation of the draft regional coastal plan virtually from its beginning. The only apparent limit on DoC's involvement was lack of time and other resources to dedicate to the process. There is an expectation that contact will continue both in reference to the plan and other statutory requirements. This will be both formal (advice of consent applications) and informal (by phone or `memo').

Despite the degree of interaction, DoC has expressed quite serious reservations about the final outcome - the notified plan is seen to be quite seriously flawed from DoC's perspective. This is assumed to reflect (among other factors) CRC's relative lack of experience in coastal management, outside the `traditional' concerns of water quality and coastal hazard management (especially erosion). Staff commented that Canterbury region, for a number of geographic, economic, and

cultural reasons, has dealt with far fewer issues and concerns in the coastal environment than have other regions such as Nelson, Wellington and Auckland.

4.4.2 Territorial Local Authorities

The territorial local authorities were involved to a lesser extent in discussions about the proposed plan, and many of them (with the notable exception of Timaru) complained of the lack of time and opportunity allowed to consider the issues and options paper and the later drafts. Several authorities, in particular Waimakariri and Ashburton, claimed that CRC was overstepping its mark in terms of jurisdiction over certain areas, and insisted that the language of the document needed to be more precise and specific in defining such matters. The Ashburton Council also sought to have a much more restricted definition of the `coastal environment' applied, claiming that the nature of its coastline and the dominant (rural) land use made a more inclusive definition inappropriate. This indicated some lingering loyalty to an earlier regime that allowed land (especially farmland) to be managed as if there were no `downstream' effects on other environmental media from land management practices.

These specific matters are noted in order to convey the generally defensive tone of the local authority's responses and involvement. There seemed to be little evidence that the Councils felt themselves empowered by the process, but rather that they were fighting some rearguard action against Regional intervention or interference in `their' area. The exception to this were found in submissions from the Christchurch City Council, and to a lesser extent the Banks Peninsula District, both of which appeared to assume a more positive and active role in the process.

4.4.3 Ministry of Agriculture and Fisheries

MAF had a much less active involvement in the regional coastal plan preparation than either DoC or the territorial local authorities. Understandably, its interest was limited to matters (potentially) affecting fisheries. The management of fisheries is specifically excluded from the RMA under ss.12(1)(c), 12(1)(e), 30(2). The draft document was criticised by MAF for focusing too much on protection, and too little on use and development of the coastal environment. MAF argued that RMA s.5 gives equal weight to the three concepts of `use, development and protection', a balance that was seen as lacking in the plan. It argued that the regional council would be failing in its duty to "enable people and communities to provide for the social, economic and cultural wellbeing" if it did not make provision for people to undertake appropriate use and development of the coastal environment.

It was argued further that the areas of significant conservation value identified by DoC were excessive, and the necessity to absolutely exclude `occupation of space' in all these areas was disputed. The plan was seen to be too restrictive of aquaculture, and a proposal was made that the council should include a commitment to consult with MAF and the aquaculture and fishing industries in order to identify shellfish harvesting area. It was proposed that CRC might usefully look to the draft coastal plans of the Otago and Southland` regional councils for guidance in terms of a more `positive' approach to provisions enabling use and development. This point was taken further in a more recent interview with MAF staff, who indicated that having compared the (draft) regional coastal plans of all the South Island regional councils, MAF might seek to `assist' CRC in meeting with fishing industry representatives, and other lobby and user groups, to better understand their views. Staff felt that MAF might take the role of facilitator in a regular forum where regional council(s), fishers, and interested agencies could consider issues and concerns.

4.4.4 The Regional Coastal Plan

The Notified Regional Coastal Plan (CRC 1994:54) includes a section headed `cross-boundary processes'. This notes that as all authorities north and south of the Canterbury region (Marlborough District Authority⁶ to the north, Otago Regional Council in the south) will have prepared coastal plans, `integration with their plans is important'. It is claimed that such integration is essential to ensure that resource issues that cross the boundary of the CMA are dealt with by all agencies involved in management of that area, and that consistent management of resource issues occurs along the entire coast of the region. `Principal cross-boundary issues' are said to include:

- "a) access to the Coast, landscape, coastal processes, erosion and control of land use in identified Coastal Hazard Zones for Territorial Authorities as well as issues of `inconsistency' between local and regional plans
- b) effects on coastal water quality from land areas and for Tangata Whenua and adjacent Regional Councils
- c) the manner in which the partnership role of the Minister of Conservation in relation to the preparation of this plan in conjunction with the Regional Council is expressed" (ibid:54).

Despite identifying the need for continued interaction, and the pertinent issues, the document goes no further than stating a general intention to maintain liaison, hold discussions, and call for

⁶Marlborough District Council is a unitary authority, and so carries out most of the functions and duties generally associated with a regional authority.

submissions from other bodies. Most of this `liaison' is in any case mandatory under the RMA. The sole mention of any proposal that might be seen as an extension of the legislative minimum requirement is the inclusion of discussions on initiatives to maintain and enhance the natural character, access, and tourist and visitor potential of the coastal environment. The plan gives no notice as to how or when the `optional' contact will occur.

The Plan also states an intention to 'maintain regular liaison on matters of common interest' with Crown agencies such as MAF, Maritime Safety Authority and Port Companies. Again no more substantial commitment is made, and staff indicate that no formal or informal arrangements or mechanisms are in place or under discussion. One positive initiative that has been taken is the establishment of the Canterbury Coastal Research Group. This is an informal meeting convened and facilitated by regional council staff at irregular intervals. It is attended by professional consultants, representatives from MAF and DoC, academics, and others who have expressed interest in either particular issues or coastal management generally.

5.1 Why Coordination

This paper began with a query as to the extent to which the legislative framework controlling coastal management is `comprehensive' or `integrated' enough to contribute to the sustainable management of the coastal environment, and whether integrative mechanisms within the legislation are being realised in practice. A brief outline of the key characteristics of the coastal environment, and the variety of demands placed on it, indicates that environmental outcomes of coastal management benefit from a greater degree of comprehensiveness and integration. Neither of these qualities has been much in evidence in the principles or practices of coastal management in Aotearoa/New Zealand in the past.

To pursue comprehensiveness or integration as an ideal `end state' would be impractical, and in any case not achievable, for a range of theoretical, social, political, and other reasons. This does not discount the possibility of a much greater degree of comprehensiveness or integration being achieved in coastal (and other environmental) management, and better coordination of agencies is seen as both contributing to this and having a range of other benefits and advantages. This process is necessarily an ongoing means to an end, rather than an end in itself.

The last decade has seen a major reform and restructuring of resource management law, local and central government administration, and much more besides. The key statute is the Resource Management Act 1991, which established sustainable management as a fundamental purpose of resource policy, applied a legal imperative to integrate management of all environmental media

(land, water, air), and markedly reduced the number of statutes and agencies involved in decision making. The hierarchical nature of the various plans and statements under the Act, and certain of the processes prescribed by it, contribute to more integrated management.

The Act is in the early stages of being interpreted and implemented, and may well be (further) amended. It would seem most unlikely, however, given the present social and political climate, that reform and restructuring on anything like the scale of the last decade will occur for many years. Strategies aimed at enhancing environmental management must therefore be appropriate and achievable within the constraints of the existing legislative and institutional framework, and coordination is seen as one such strategy.

Better coordination within and between agencies may not be sufficient to wholly overcome the tendency to fragmentation, sectoralism and specialisation, which is potentially destructive to the objective of sustainable management. It is, however, more likely that actors will feel their position less challenged by efforts to coordinate, than by a drive to integrate, and so will offer less resistance to the idea of joining with others in applying their expertise or specialist knowledge to a particular problem or issue. Coordination of effort is possible within existing legislative and institutional frameworks, without requiring agencies to compromise their mandate(s), and may over time contribute to a greater degree of `comprehensiveness' in policy making.

5.2 Incentives to Coordinate

While visiting and talking to people and agencies involved with coastal management, a common feature observed was their level of 'busyness'. The relaxed and genteel underemployment of 'Glide Time' and other popular legend is conspicuously absent. For this reason (among others) there must be some incentive for already burdened groups and individuals to accept and engage in practice the concept of coordination. Each of the four models of coordination posited by Minnery (section 3.0ff) contains some element of incentive.

5.2.1 Coordination by Hierarchical Control

There are clear parallels with this model and the level of coordination observed to date among the agencies surveyed - legislative imperative is unquestionably a powerful incentive. The RMA may be seen as a mechanism establishing a 'top down' structure, with the decisions and actions of lower level players prescribed by the upper levels, and requiring (or at least allowing for) their input. The singular purpose of the Act provides a goal, and implies values, that ought to guide the management process at all levels. Other requirements of the Act, such a s.32(a)(ii), would seem to require agencies to be aware of, and sensitive to, opportunities to offer and seek assistance in fulfilling their duties. The model fails to the extent that

- (i) it is difficult to cast the Minister for the Environment in the role of a powerful, well-resourced central controlling agent
- (ii) resistance could be expected if it was perceived that the decentralisation of decision making and implementation that is presently allowed was under threat
- (iii) the difficulty of making `good' decisions based on (often inadequate) information about a dynamic environment that may be remote from the decision maker is a strong argument for local rather than central direction

Furthermore, the RMA contains sufficient ambiguity or flexibility to preclude clear and irrefutable divisions of functions, rights and responsibilities, nowhere perhaps more so than in regard to the coast. The matter is further complicated by other Acts and mandates that may cause conflict and lack of surety. Therefore incentives to coordination must come from elsewhere than the legal requirement.

5.2.2 Use of Power

Minnery refers to Lukes' three faces of power - to make decisions; to keep items off the agenda; to manipulate information. Associated as it is with coercion, this model may be more properly said to contain `negative incentives', a sense that failure to coordinate will impose a cost or penalty. As noted earlier, this form is also costly in terms of maintaining stability and compliance.

5.2.3 Mutual Adjustment

To the extent that "...the Resource Management Act is an extension and continuation of the reform of government generally as influenced by New Right thinking..." (Buhrs and Bartlett 1993:134) one would expect elements of this `free market' model to emerge. It is certainly conceivable that agencies will seek to negotiate with others in the interests of advancing their own agenda(s). Looked at in this light, one could arrive at a (perhaps unkind) interpretation of a MAF proposal to `assist' the CRC in gaining a broader understanding of coastal management matters, by introducing them to the concerns of recreational and commercial fishers. Similarly the Council's proposals to facilitate liaison groups of `interested parties' could be seen as creating a mechanism for resolving disputes that is most amenable to Council control.

More benign forms of this model are apparent, for example in appeals from territorial authorities for the regional council to make short term concessions in respect to water discharge quality from certain source(s), on the basis of treatment or other measures being undertaken to improve water quality generally over the longer term. Doubtless such bargaining has been and will be a feature of management, but it remains relatively expensive in terms of time and other resources. It is more suited to `one-off' situations than comprehensive measures, but can still create complex burdens of obligation and resentment, and makes players vulnerable to accusations of `log-rolling' and political expediency.

5.2.4 Common Purpose

Coordination by common purpose, with its associated attributes of active and willing compliance, and mutual benefit, must clearly rank as a preferred mechanism. It is also recognised as perhaps the most difficult, but as with comprehensiveness and integration, the concept might be realised by increments or in stages, stressing that coordination is as much a process as a goal. It is possible to extract a measure of common purpose from the legislation driving the coastal management agencies - the Fisheries Act, Conservation Act, and RMA all speak to some extent of a need to protect and enhance resources. Agencies tend however to have particular perceptions of their primary task or mandate, and change to such organisational or cultural norms is not easily provoked.

It is arguable that `common purpose' has driven coordination of effort in the past and may do so again. It was indicated by staff of a number of agencies that both formal and informal coordinating mechanisms existed between units of local government now defunct, such as catchment boards. As the dust and confusion of reform settles, agencies and their constituent personnel will become more confident of their role, and their relationship to others. In this context it is conceivable that

conditions favouring coordination will again emerge. This is particularly so when, for example, adjoining councils or agencies with overlapping jurisdiction recognise the futility of both gathering and analysing information about the same or very similar resources or phenomena, as in the example of monitoring given above. As the new legal and institutional structures become more familiar and better understood, actors may feel more confident about testing the opportunities to coordinate. This process may be enhanced by educating people as to its benefits, by establishing appropriate and 'user friendly' mechanisms, and perhaps most convincingly by personal experience that coordination is indeed conducive to achieving goals and fulfilling needs.

5.3 Disincentives

The most obvious disincentive that emerges is the perception that agencies' mandates or objectives clash or conflict. This might be mitigated, but is unlikely to be entirely eliminated, as it is inevitably true that agencies serve different 'client groups' with different needs and demands.

It has been implied above that where agencies or individuals are unsure of their role, or the precise limits of their areas of power and responsibility, they are more inclined to be defensive and insular. This tendency may be reinforced whenever legislation is amended or reinterpreted in a way that clouds understanding of positions or relationships.

A lack of resources, or geographic location, may make coordination difficult for practical reasons. For example, close links must be more difficult to forge between MAF officers based in Dunedin and DoC or CRC personnel in Christchurch, given that more expenditure of time and other resources would be required.

Coordination might also be discouraged when efforts are not seen to be productive. DoC staff in Christchurch might be forgiven for discounting the value of close liaison when the CRC regional coastal plan, the product of much sharing of views and information, is nevertheless seen to be deficient from DoC's perspective. (It must be noted that to their credit, DoC staff exhibit no outward signs of such disillusion!)

CHAPTER 6 RECOMMENDATIONS

Better coordination of management agencies has considerable potential as a low cost, effective strategy for improving policy outcomes in the coastal environment. This can be achieved within the existing framework and institutions of coastal management. There are elements of the legislation that require some degree of procedural coordination. Following is a number of steps that could facilitate acceptance of the need for better coordination, and so enhance development of the substantive model.

The Ministry for the Environment should continue to advocate for a more comprehensive approach to resource management, and for full utilisation of the integrative mechanisms of the RMA. Any institutional and legislative changes or amendments that are made must clarify agency roles and responsibilities rather than generate uncertainty. Lack of clarity produces defensiveness and discourages compromise and cooperation. The advantages of pursuing coordination beyond that required by statute should be advanced.

Agencies must be encouraged to recognise that while they pursue different mandates, they still have elements of common purpose with others. This could be highlighted by stressing the theme of sustainability as an objective common to all agencies under existing legislation.

Central government agencies (especially DoC and MAF) should identify areas where their expertise and guidance makes them the appropriate body to coordinate national programmes, as in the example of monitoring. Opposition to closer contact can be overcome to the degree that greater effectiveness and efficiency in management is achieved.

Successes and savings made by coordination, and the mechanisms by which they were achieved, should be highlighted to encourage further interest and acceptance. Relatively simple mechanisms, such as regular liaison, sharing of information, and advising others of work in progress or planned, can be effective.

Regional councils should provide a focus for coordination of territorial local authorities, as a way of enhancing performance without compromising local autonomy. Public participation in coordinated and cooperative processes should be encouraged.

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