



#### **BIBLIOGRAPHIC REFERENCE**

Blackett, P. and Hume, T.M. 2011. Governance issues with respect to coastal erosion management in New Zealand, *GNS Science Report* 2011/34. 36 p.

#### **DISCLAIMER**

This report or document ("the Report") is given by the National Institute of Water & Atmospheric Research Ltd, (NIWA) solely for the benefit of the Institute of Geological and Nuclear Sciences. Neither NIWA nor any of its employees makes any warranty, express or implied, or assumes any legal liability or responsibility for use of the Report or its contents by any other person or organisation.

NIWA Project No: NIWA project GNS 09304

NIWA Client Report: WLG2011-25

- P. Blackett, National Institute of Water & Atmospheric Research Ltd, 301 Evans Bay Parade, Hataitai, Wellington, PO Box 14901, Wellington, New Zealand.
- T. Hume, National Institute of Water & Atmospheric Research Ltd, 301 Evans Bay Parade, Hataitai, Wellington, PO Box 14901, Wellington, New Zealand.

© Institute of Geological and Nuclear Sciences Limited, 2011 ISSN 1177-2425 ISBN 978-0-478-19858-4

# **CONTENTS**

ABSTRACT							
KEYWORDS							
1.0	INTRODUCTION						
	1.1 The Resource Management Act (1991)						
	1.2	Roles of the agencies involved in coastal management					
		1.2.1	Minister of Conservation/Department of Conservations				
		1.2.2	Minister/Ministry for the Environment				
		1.2.3	Local authorities	6			
		1.2.4	The general public and Non-Governmental Organisations	6			
	1.3	Summ	ary	7			
2.0	METH	10D		7			
3.0	RESULTS AND DISCUSSION						
	3.1		ment of Conservation				
	0	3.1.1	Regional Conservancy				
		0.1.1	3.1.1.1 Perceived role of DoC's role in coastal management				
			(summary)	9			
			3.1.1.2 Perceived role of other organisations in coastal	4.0			
			management	10			
			3.1.1.4 Relationship with Head office and other Conservatories				
			3.1.1.5 Relationships with the general public and NGO's				
		3.1.2	Marine Conservation Unit (Head Office Wellington)	11			
		3.1.3	Summary of MCU role	12			
		3.1.4	Comments on the NZCPS	13			
		3.1.5	Is the Coast being managed well?	13			
		3.1.6	Relationships with the DoC Regional Conservancies				
		3.1.7	Relationships with Local Councils	14			
		3.1.8	Ministry for the Environment	14			
		3.1.9	NGO's and the public	14			
		3.1.10	Overall summary of DoC's perceived role in coastal management	14			
	3.2	Ministr	y for the Environment	15			
		3.2.1	Is the coast managed well?	16			
		3.2.2	Relationship with the Department of Conservation	17			
		3.2.3	Relationship with other government ministries and professional organisations	17			
		3.2.4	Relationship with Local Authorities	17			
		3.2.5	Relationship with the general public and NGO's	17			
	3.3	An NG	O perspective: Environmental Defence Society	18			
		3.3.1	Is coastal management working well?	19			
		3.3.2	Relationship with Ministry for the Environment and Department of Conservation	20			
		3.3.3	Relationships with Community groups and other NGO's				
		3.3.4	Relationships with Local Authorities				

	3.4	District and Regional Councils				
		3.4.1	Is coastal management working well?	21		
		3.4.2	Perceived roles of other organisations	22		
		3.4.3	Relationships with other organisations	23		
	3.5	Coasta	Coastal consultants			
		3.5.1	Is coastal management working well?	23		
		3.5.2	Relationships with other agencies, communities groups and NGO's	25		
		3.5.3	Perceived role of other organisations in coastal management	25		
	3.6	Key th	Key themes			
		3.6.1	Lack of a clear national level directive	25		
		3.6.2	Who represents the national interest?	26		
		3.6.3	Absence of long term planning or consideration of cumulative impacts	28		
		3.6.4	Poor on the ground implementation of the NZCPS			
	3.7	Planni	ng boundaries are confusing and poorly aligned with natural process	s .28		
	3.8	Loop holes in the RMA				
	3.9	Power	issues – developers vs. communities	29		
	3.10	) Resou	rcing and information needs for smaller Councils	29		
	3.11	Weak	relationships between coastal management agencies	29		
	3.12	2 What v	will the changes in the RMA mean?	30		
4.0	FUTURE WORK					
	4.1	Conclu	usions	30		
5.0	AC	KNOWLE	DGEMENTS	31		
6.0	REFERENCES					
			FIGURES			
Figure	1	The interrelationship between plans and policies under the RMA from October 2009 (adapted from http://www.qualityplanning.org.nz/plan-development/structure-organisation-plans/key-rma-documents.php)				
Figure	2	Coastal management boundaries for policy and planning documents (adapted from http://www.qualityplanning.org.nz/plan-topics/coastal-land-development.php#guidance)				
Figure 3		The respective roles of the organisations involved in this study				

#### **ABSTRACT**

This report looks at eight New Zealand case studies from a social science and coastal science perspective. It investigates the factors which influenced their coastal erosion mitigation decisions and at relationships and interactions between resource management agencies, and central and local government.

The roles and responsibilities of resource management agencies as dictated by the Resource Management Act (1991), (RMA), are discussed, along with the roles of Non-Governmental Organisations (NGO's) and community groups.

Blackett and Hume suggested that the constraints and division of responsibilities between management agencies under the RMA may influence decisions on how to respond to coastal erosion. Agencies were asked how they perceived their role, and the role of other agencies, in coastal environment governance to give an insight into how comprehensive and coordinated the current coastal governance arrangements are in practice.

#### **KEYWORDS**

Coastal erosion, mitigation, RMA, resource management, governance, strategies, roles, relationships, decision-making.

#### 1.0 INTRODUCTION

Between 2004 and 2010, a series of 8 case studies through-out New Zealand investigated the factors which influenced the selection of different coastal erosion mitigation strategies (i.e., a sea wall or managed retreat) (Blackett & Hume, 2007 & 2010). One of the factors which affected the outcome was related to the relationship and interaction between key resource management agencies. The roles and responsibilities of coastal management in New Zealand are shared by a number of central and local government agencies and largely dictated by the Resource Management Act (1991) (RMA). Key roles are assigned to Regional and District Councils, the Department of Conservation (DoC) and the Ministry for the Environment (MfE). Other government departments, for example, the Ministry for Civil Defence and Emergency Management (MCDEM) and non-government organisations such as the Environmental Defence Society (EDS) also have an interest in the coastal environment, but hold a reduced role in overall governance. In the case of NGO's and community groups, their role is generally constrained to "being consulted" or acting as submitters in the decision making process (Blackett & Hume 2006). Blackett and Hume (2006) suggested that the constraints and division of responsibilities between management agencies under the RMA (1991) may affect the outcome of decisions on how to respond to coastal erosion. The aim of this work was to further investigate this hypothesis, with a particular focus on how each organisation or group perceived their role in governance in the coastal environment, and equally importantly what they perceived to be the role of others. This line of questioning will provide insight into how comprehensive and co-ordinated the current coastal governance arrangements are in practice.

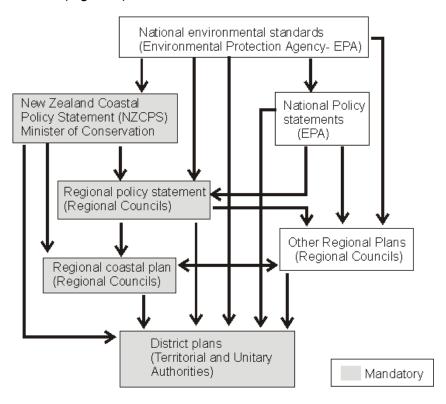
In order to provide a context for this research it is import to first explore how the current governance structure for the coastal environment works in theory, under the RMA (1991). It is important to note, that this review is not designed to be a comprehensive legal discussion document, it is an overview of the key points from a social science and coastal science perspective.

#### 1.1 The Resource Management Act (1991)

The purpose of the RMA is to promote the sustainable management of natural and physical resources (s5(1)). Sustainable management requires the balancing of social, economic and environmental considerations (s5(2)) with a heavy weighting given to needs of future generations (s5(2)(a)), maintaining ecosystem integrity (s5(2)(b)) and focusing on "avoiding, remedying or mitigating any adverse effects of activities on the environment" (s5(2)(c)). Specific mention of the coastal environment as a matter of national importance occurs in section 6. In particular, it requires anyone exercising powers under the Act to "recognise" and "provide for " the preservation of the natural character of the coastal environment (including the coastal marine area¹), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development" (s6(a))".

<sup>&</sup>lt;sup>1</sup> The Coastal Marine Area (CMA) is defined as the area between the mean high water spring (MHWS) and the edge of the Territorial Sea (s.2) (Gregory, 2008).

In general, the everyday management of the coastal environment is delegated to local authorities and informed by a hierarchy of interdependent policies and plans at national, regional, district level (Figure 1).



**Figure 1** The interrelationship between plans and policies under the RMA from October 2009 (adapted from <a href="http://www.qualityplanning.org.nz/plan-development/structure-organisation-plans/key-ma-documents.php">http://www.qualityplanning.org.nz/plan-development/structure-organisation-plans/key-ma-documents.php</a>)

At the national level, the Environmental Protection Agency (EPA)<sup>2</sup>, which is managed within the Ministry for the Environment, can develop National Environmental Standards (NES) and National Policy Statements (NPS). Although neither NES nor NPS are mandatory, nor do any such documents currently exist, if they did, their content must be reflected in all the other planning documents, including the New Zealand Coastal Policy Statement (NZCPS).

At present, the only mandatory national level policy statement is the NZCPS, prepared by the Minister of Conservation/Department of Conservation (Central Government). The purpose of the NZCPS (s 56) is to state policies in order to achieve the sustainable management of the coastal environment, which may comprise any matter that the Minister of Conservation considers relevant to achieving the purposes and principles of the Act (Department of Conservation 1994; Rouse and Goff 2003). In 1994, the first NZCPS was prepared. It contained policies regarding maintenance of natural character, sub-divisions, coastal hazards, maintenance and enhancement of public access, Treaty of Waitangi and International obligations (Department of Conservation 1994). Specific reference is made to the susceptibility of the coastal environment to natural hazards and a precautionary approach is promoted due to knowledge gaps over coastal process. Moreover, it requires plans and policies at the regional and district level to recognise and provide for the mitigation or avoidance of the effects of natural hazards through enhancing and preserving natural

\_

<sup>&</sup>lt;sup>2</sup> The EPA was established by the 2009 RMA amendments its functions are described in s 42C.

3

features that could offset effects (i.e., dunes, mangroves, wetlands), carefully considering locations of new sub-divisions, recognising potential inland migration of natural features as a result of natural processes and use the best practicable option when existing properties are threatened by hazards, including doing nothing.

A review of the NZCPS began in 2004, with the intention of updating the policy statement to account for current issues in the coastal marine area, in particular, the increasing subdivision pressure (Department of Conservation Policy Group, 2008). A revised document was presented in 2008 and a Board of Inquiry was established to hear public submissions on the draft. Although the proposed NZCPS provides stronger direction in dealing with coastal management issues than its predecessor (Department of Conservation 1994; Department of Conservation Policy Group, 2008) the Board has since proposed a number of changes in line with the numerous public submissions (538 in total). The Boards report is currently beginning considered by the Minister of Conservation. The Minister may accept the recommendations either in total or in part or decide on a further rewrite of the document to reflect the views of the new National Government (elected in 2008).

Underneath the NZCPS sit the Regional Coastal Plan and the Regional Policy Statement, both are mandatory documents (s64(1)), which are prepared by Regional Councils³. Both the Regional Policy Statement and the Regional Coastal Plan must "give effect to" the NZCPS. In addition, the Regional Coastal Plan must "give effect to" the Regional Policy Statement as well as "not be inconsistent with" any other Regional Plan. It is important to note that all other regional plans are optional and at the discretion of the Regional Council. The Regional Coastal Plan is approved by the Minister of Conservation and sets out information on how the coastal marine area will be managed in accordance with the purpose and principles of the RMA. However, as Rouse and Goff (2003) point out, Regional Councils may also promote, through any Regional Plan and the Regional Policy Statement, the integrated management of the coastal marine area and the coastal environment. In effect, they can influence any decision within the coastal environment and have a role in hazard mitigation.

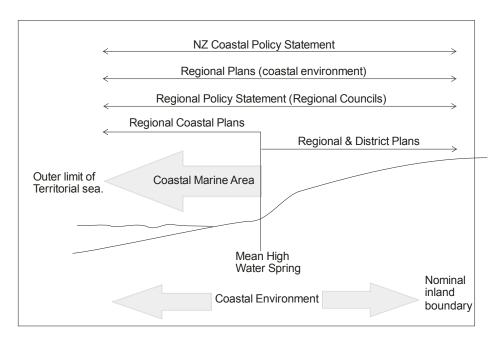
District<sup>4</sup> or Unitary<sup>5</sup> Authority plans are the next tier of plans and may not be inconsistent with the Regional Coastal Plan (or any other regional plan) and must give effect to the NZCPS, and any national or regional policy statements. The plans set guidelines for land use management, subdivision, noise control and hazard mitigation and must address issues which are considered significant in that district or city. Under the Building Act (2004), City or District Councils can issue building consents for structures, coastal defences and domestic dwellings.

A further demarcation of responsibility between Regional and District Councils occurs across Mean High Water Spring (MHWS). Activities which are within the Coastal marine area (CMA), or in other words, below MHWS are the responsibility of Regional Councils. Any activity which occurs above MHWS is the responsibility of District Councils. Unitary authorities cover both areas.

<sup>5</sup> Councils where the functions of the Regional and District councils have been combined.

<sup>&</sup>lt;sup>3</sup> Regional Councils are required to sustainably manage natural and physical resources (i.e., water, soil and air).

District and City Councils focus more on land use activities (e.g., subdivision or consents relating to particular land uses).



**Figure 2** Coastal management boundaries for policy and planning documents (adapted from http://www.qualityplanning.org.nz/plan-topics/coastal-land-development.php#guidance)

Any proposed activity within the coastal marine area is allowed only if it is specially mentioned in a Regional or District Rule (described in the relevant plan). Activities are categorised, through the rules, into permitted, controlled, restricted, discretionary, noncomplying and prohibited activities (section 77A(2)). Permitted activities may occur "as of right" without the need for a coastal permit, however, controlled, restricted, and discretionary activities require permission from a local authority. Non-complying activities cannot occur unless there is a rule change in the relevant plan. If the proposed activity is listed as being controlled or restricted the applicant may submit an application for a coastal permit to the Regional Council (or unitary authority). Any appeals on the Council's decision may be taken to the Environment Court. In 2009, the RMA was amended to allow an application to move straight to the Environment Court at the applicant's request — a request which requires the approval of the consenting authority.

However, if the activity is classified as discretionary or non-complying it is known as a restricted coastal activity (RCA). This means the Regional Council surrenders it normal right to hear a consent application to a committee, which includes a nominated representative of the Minister of Conservation. Any decisions made by the committee may be appealed to the Environment Court. Similar to applications for controlled and restricted activities an application may move straight to the Environment Court at the applicant's request. Pre 2009, the Minister of Conservation had the final decision making power over RCA and both the hearing committee and the Environment Court supported this decisions through providing recommendations. However, the recent amendments remove this decisions making power but do leave the Minister of Conservation with the right to appeal decisions (s(120)(1)(c)) and monitor the effects of coastal permits. In effect, the outcomes of RCA applications are

<sup>&</sup>lt;sup>6</sup> Note this category will be removed progressively over the next 3 years.

5

now decided by either the hearing committee or the Environment Court.

If the application is deemed to be of national significance (i.e., is called in) then the Minister of Conservation must decide whether it will be heard by a Board of Inquiry or the Environment Court. If the application crosses the coastal marine area boundary the decision over who hears the application needs to be made in conjunction with the Minister for the Environment.

# 1.2 Roles of the agencies involved in coastal management

The RMA clearly specifies the roles and responsibilities of the agencies involved in coastal management in New Zealand. Organisations with key roles include the Minister/department of Conservation, the Minister/Ministry for the Environment, and Local Authorities. Other organisations (i.e., community groups and Non-Government Organisations) and individuals may become involved through making submissions on plans, policies or resource consent applications. The following section briefly describes the statutory roles of the respective organisations.

# 1.2.1 Minister of Conservation/Department of Conservations

The Department of Conservation was formed by the Conservation Act 1987, which outlines the majority of the department's roles and functions. In its role as a conservation advocate, the Department administers 25 Acts and has key roles in a further 15 including the RMA and Local Government Act 2002 (http://www.doc.govt.nz/about-doc/role/legislation/).

Under the RMA (1991) the functions and role of the Minister of Conservation in coastal management include;

- 1) Prepare NZCPS. Until the revised version is signed off by the Minister the 1994 version remains in effect. In Schedule 1<sup>7</sup> of the NZCPS any activity which DoC considers to have potentially significant impact on the coastal environment is listed as a restricted coastal activity (RCA). Council Plans and polices are influenced by this list in when considering what will constitute an RCA at the local level.
- 2) Approve Regional Coastal Plans and work with local authorities to ensure that Coastal Plans give effect to the NZCPS.
- 3) Appoint a member to hearing committee for a RCA resource consent application.
- 4) Call in matters of national importance and decide if these are heard by the Environment Court of a Board of Inquiry. The EPA has a role here if the application crosses the boundary of the CMA.
- 5) Monitor the impacts of coastal permits.
- 6) Act as a submitter in non RCA coastal permit applications (or any other consent application) where the interests or statutory responsibilities of the Department are affected.
- 7) Overall the Department acts to support the role of the Minister through the provision of advice.
- 8) The Minister also has a role in customary activities in the coastal marine area, the description of which is outside the scope of this research.

GNS Science Report 2011/34

\_

<sup>&</sup>lt;sup>7</sup> This schedule may be removed if the Minister accepts the recommendations of the Board of Inquiry.

# 1.2.2 Minister/Ministry for the Environment

Under the RMA the Minister for the Environment has a number of responsibilities with respect to resource management (section 24) which may have some influence on coastal management:

- 1) Create national policy statements and national environmental standards (Section 52) which may have an influence on the NZCPS.
- 2) Decide on whether or not an issue (above the MHWS) is of "national importance" and should be called in (Section 6AA). For consent applications which cross the MHWS boundary then the decision is made jointly with DoC. If matters are called in then a decision on whether the application should be heard by a Board of Inquiry or the Environment Court needs to be made.
- 3) Monitoring the effect and implementation of the RMA, including any regulations in force under it, national policy statements and water conservation orders. This relates to the coastal area where national policy documents influence the NZCPS.

#### 1.2.3 Local authorities

Local authorities have a number of roles and responsibilities for the Coastal environment under the RMA. These include:

- 1) Prepare policies and plans in accordance with the hierarchy of plans and polices under the RMA (1991) which fulfil the purpose and principals of the Act. As part of the rules Councils need to establish what activities are classified as permitted, controlled, restricted, discretionary and non-complying activities and any conditions or standard which will be attached to each class. This is important because it provides a guide as to what sort of activities may occur along the coast and what activities are considered to be RCA.
- 2) Hear the appropriate resource consent applications. Regional Councils hear consent applications for coastal permits (any activity which occurs within the CMA i.e., below MHWS) and consent applications involving land air or water management above the MHWS. A committee (comprising one member appointed by DoC) hears any applications which are classified as RCA. District Councils hear any applications above MHWS related to land use.

# 1.2.4 The general public and Non-Governmental Organisations

Members of the public and non-government organisations may influence coastal management through:

- 1) Preparing submissions on any NES, NPS, the NZCPS and any plan or policy produced by a local authority.
- 2) Becoming involved in defining community outcomes and preparing submissions on Long term Council Community Plans under the Local Government Act 2002.
- 3) Preparing submissions on any proposed activity in the coastal environment and participating in the resource consent process.
- 4) Forming a lobby group and seeking to influence local politicians.

Some of the 2009 RMA amendments have potential implications for the involvement of local communities and NGO's in the RMA process these include:

- 1) Ability of the applicant to be heard in the first instance by the Environment Court or have the application classified as a matter of national importance and called in. This may affect a community group or NGOs ability to become involved in resource consent application because of the financial and information requirements necessary to participate effectively at the Environment Court level (Blackett & Hume (2006). In addition, for many members of the community, involvement in Environment Court proceedings may be personally daunting especially for those with no past experience.
- 2) Change in the ability of the Environment Court to award costs against claims deemed as frivolous. Many community groups and NGO have limited financial resources and the risk of having costs awarded against them at the Environment Court may act as a significant barrier or deterrent to participation.

The precise impact will emerge over the next few years as the new provisions are applied.

Blackett & Hume (2006) believe that it is highly likely that the complex framework for coastal management to some extent constrains community involvement in decision making.

# 1.3 Summary

In summary, the RMA (1991) provides a complex governance framework for the sustainable management of the coastal environment where each organisation has a defined role and responsibility. However, a key question remains over how this actually works in practice. In particular, how the plan hierarchy operates, how organisations interact and how coastal management decisions are actually made on the ground. This work will begin to address these questions through exploring the perceived roles and responsibilities of key organisations and their respective reflections on how coastal management currently operates in New Zealand.

#### 2.0 METHOD

A series of unstructured interviews were undertaken with key management agencies and associated organisations/individuals with an interest in coastal erosion and management issues between late 2007 and early 2010. Interviews were held with staff from Regional and District Councils, Department of Conservation (DoC both Head Office and Regional Conservancy Staff), Ministry for the Environment, Environmental Defence Society (EDS) and several coastal consultants. Participants were selected through established contacts within the various organisations. Interviews lasted between 1 ½ and 3 hours and were usually undertaken at the participant's place of work. The majority of interviews were conducted in a group setting to simulate debate and discussion between colleagues. Interviews were tape recorded and subsequently transcribed. The details of the transcripts remain confidential and only general information is reported here to maintain the confidentiality of the interviewees. However, confidentially in some cases is difficult to maintain which was acceptable to the participants. The nature of the group discussion has impacted on the ability of the authors to attribute quotes to individual participants – thus quotes are not referenced.

Key lines of questioning for each organisation revolved around:

- 1) What their perceived role and responsibilities were for coastal management under the RMA.
- 2) What they perceived was the role of others.
- 3) How well they thought the current coastal management governance structure was achieving the purpose and principles of the RMA (1991) i.e., sustainable management.

The initial focus of the research was on coastal erosion issues however it inevitably broadened out into coastal management in general.

#### 3.0 RESULTS AND DISCUSSION

# 3.1 Department of Conservation

The Department of Conservation is a central government agency reporting to the Minister of Conservation. Its structure is decentralised, with a Head Office in Wellington, two regional (North and South Island) and 13 conservancy offices located throughout New Zealand. The primary role of each of the 13 conservancy offices is to ensure quality conservation management in the conservancy it manages. Each conservancy is then further split into several area and field offices that deliver conservation outputs for the region. They carry out a number of functions under numerous Acts in terrestrial, aquatic and marine environments. Participants reported that the current structure of the Department reflects the restructuring following the Cave Creek incident in 1995 (for further information on this incident see Isaac (1997)).

Participants were from both the Marine Conservation Unit (MCU) based in the Wellington head office and Regional Conservancy Offices. Although these two groups do interact on an issue by issue basis, they are entirely separate within the DoC organisational structure. The MRU appears to take a national level policy perspective while the Conservancy Offices face more local issues. However, both groups believe they take a sustainable management approach rather than a strict "conservation advocacy" approach in coastal management issues. Often they enter debates with no fixed outcome in mind and have a focus on the process to ensure this works well.

# 3.1.1 Regional Conservancy

Much of DoCs' focus is geared towards managing and funding issues associated with national marine and terrestrial parks which are one of their key statutory responsibilities. In terms of the RMA, one participant described their role as "statutory advocacy and proving advice to the Minister (of Conservation) in relation to the Ministers role under the RMA" within the local context. At the time the interviews occurred, coastal resource management issues represented only a small part of what the regional conservatories become involved with. In spite of their responsibilities under the RMA, "Much of our work at present is related to freshwater" resource management issues.

Staff in the Regional Conservancy Offices, get involved in a particular coastal hazard/management issue for several reasons; First, they are required to, because an application for resource consent is a restricted coastal activity, and second, to represent important local conservation issues. If the activity is an RCA, the Minister has a statutory role

and Department staff support this, moreover, there is a strong focus on making sure the process is right so the Minister can make good decisions. The case of the Whangamata marina application was mentioned where Minister of Conservation (at the time) collected additional information above and beyond that supplied by RCA hearings committee despite an RMA requirement that a decisions was made based on only the information provided by the Hearings committee of the Environment Court. Although the group felt the additional information was worthwhile, they recognised it was outside of the constraints imposed by the RMA. There has been considerable post-interview speculation that the Whangamata case was one of the factors which influenced the October 2009 amendment which removed the Minister as the final decision maker on RCA.

In terms of involvement to protect important local conservation issues (often as a submitter to a consent application), they have limited resources and time so cannot get involved in every issue. "We have make some priority decisions about whether we engage in issues ... the threshold for our involvement has progressively been lifted over time". The pre-requisite for their involvement was described by one participant as "If it doesn't involve endangered species or important habitat or important ecological values then we're not getting involved". However, this participant went on to point out that DoC was interested in maintaining sandy beaches and public access and will in some cases get involved in coastal erosion management debates to conserve the natural character of beaches "to ensure that people can still go walking along these beaches and not be flanked by a rock revetment that looks like a fortress". However, due to their financial and time constraints they do not always get involved in order to protect the natural character of the coastline, especially if there are no other conservation interests at stake. If they were to get actively involved in issues such as coastal sub-division "we would need to be resourced in a completely different way to what we are as the issues are massive".

In general DoC tend to avoid involvement in areas they consider urbanised or already highly modified, because of the lack of conservation value and a belief that 'local community issues" are best resolved between the Council and local communities. For the participants, at these sorts of location the "natural character has been already degraded and it's turning into a people place". There appears to be the hope that because Local Authorities (both at the regional and district level) are already required to give effect to the policies within the NZCPS that this is enough input for DoC in highly modified coastal environments.

#### 3.1.1.1 Perceived role of DoC's role in coastal management (summary)

The Minister of Conservation has a role under the RMA which is clearly defined. Outside of this role DoC acts as a submitter on consent applications and plan changes. It has greater weight as a submitter where its interests under the Conservation Act are potentially impacted. When operating within the RMA role DoC takes a sustainable management approach rather than pursuing more conservation oriented goals.

GNS Science Report 2011/34 9

\_

<sup>&</sup>lt;sup>8</sup> At the time of the interviews the Minister of Conservation was still the consenting authority for RCA, this has since changed.

#### 3.1.1.2 Perceived role of other organisations in coastal management

Participants believed it was the responsibility of Local Councils and the community to sort out many local issues, particularly in highly modified coastal environments. However, they felt that in many coastal management issues there were not stakeholders present to represent the wider regional or national interest. National level direction is absent and should be filled by another organisation.

#### 3.1.1.3 Is Coastal management working well?

The participants did not believe coastal management was working well for various reasons as follows:

- Many Council plans and policies "say all the right things" but they have trouble applying the NZCPS on the ground. One participant felt that a few Councils "don't feel it applies to them".
- There are several key loop holes in the RMA which affects successful coastal management, for example 100 m of sea wall can be constructed without it becoming an RCA, which means seawalls can be constructed incrementally over time without the overall impact being considered. This operates until the incremental distance reaches a trigger value of 300 m whereby it becomes an RCA. It is possible that a wall could be constructed in segments separated by a short distance as this would not technically be an RCA. However, this has not been tested in court. In addition, a wall built above the mean high water spring avoids becoming an RCA and thus goes through with the normal consent process with the appropriate local authority. Irrespective of on-going coastal erosion which may soon place the wall below MHWS.
- Cumulative issues are not well managed. There does not seem to be any overarching
  vision at the regional level. Emphasis on effects based assessment of consent
  applications in the absence of a bigger picture leads to ad-hoc disjointed solutions. Many
  walls and erosion issues are dealt with in such and ad-hoc and piecemeal way that "it is
  really hard to get involved and argue some of the big picture stuff".
- In many cases erosion mitigation strategies are just building on what was already there.
   For example many at risk communities or at risk infrastructure has had rocks dumped in front of it for years and this precedent is very hard to change with the current legislation, nor are many local authorities willing to attempt it.
- There is no agency to bring the broader perspectives to coastal management; if the Council does not do it, and DoC does not get involved, nobody does and the matters get resolved by local debate. There are questions over how appropriate this is. "There are big conservation issues on the coast .... Having parts of the coast with no buildings would be nice ... but in the end those are not necessarily the sorts of things Doc will be able to protect".
- Many District Councils can be very pro-development due to financial incentives; this has resulted in many subdivisions at previously undeveloped locations.
- Coastal management often deals with only the symptoms of a problem (e.g., build a wall
  to halt erosion) but ignore the underlying causes and long term trends. Sea Level rise will
  expose many low lying coastal areas to greater risk from coastal erosion and coastal
  inundation. One of the participants believed that planning needs to change its focus from
  dealing with the symptoms (with say rock walls) and deal with the long term issues which
  is coastal development in general.

- Building consents issued since 1991 in some dubious locations and many expensive homes have gone up - some threats are made such as "if you don't let us build a wall we will take you to court as you issued the building consent".
- Dealing with some beach front land owners is difficult, especially if they are "very wealthy, very assertive and not prepared to sit back they are prepared to challenge".

#### 3.1.1.4 Relationship with Head office and other Conservatories

The Regional Conservancies are in regular contact with head office (Marine Conservation Unit) as well as other conservancies with respect to coastal management issues. Although all the RCA's and regional coastal plans go to head office for consideration and approval, respectively, the relevant conservancy provides local input.

Each conservancy has its own Conservator and thus a potentially different approach to their roles and responsibilities as a result "DoC has been criticised for being inconsistent" in its behaviour, choices and decisions around conservation management (including coastal management). Participants felt that the divisions within DoC were both a strength (ability to act appropriately at the local level and remain in touch with local issues) and a weakness (an inconsistent approach).

#### 3.1.1.5 Relationships with the general public and NGO's

Participants believed that "Doc is the only government agency left on the ground". The area office knows the local issues because they are effectively members of the community themselves. However, it also affects the way in which they behave and the issues they get involved with may not have much of a conservation focus at all. The local DoC area and field offices regularly receive calls and questions from the general public about coastal management issues.

#### 3.1.2 Marine Conservation Unit (Head Office Wellington)

The Marine Conservation Unit (MCU) takes a higher level more planning oriented overview of coastal management in New Zealand compared to the Regional Conservancies. This is enabled by the fact that they are removed from local politics and are able to take a "tougher stance on particular issues" because they are not part of the community. Although similar to the Regional Conservancies, they primarily deal with Marine Park or endangered species issues rather than coastal erosion management.

From the participants' perspective, the MCU has several key roles in day to day coastal management<sup>o</sup>; provision of advice and support to the Minister on RCA decisions and other significant issues; principally planning related guidance to the conservancies and Local government; and involvement in high profile cases which they deem to be of national significance. Each of these roles is informed by the NZCPS statement as "it is up to the Department to uphold and support the policies and principals in this document as that's the Governments intension for the coast.... So that's our underlying document".

At the time of the interviews, the Minister of Conservation held final decision making authority on RCA. The MCU was charged with ensuring the RCA consent process was handled in accordance with the provisions of the RMA and that the Minister had the

<sup>&</sup>lt;sup>9</sup> This excludes the preparation/revision of the NZCPS which occurs every approximately every 10 years.

appropriate advice and support to make a decision. It was clearly pointed out by one of the participants, that the Minister was able to make decisions only on the information presented by the hearings committee and not permitted to gather further independent evidence. The Whangamata Marina case has often been cited as an example where the Minister overstepped the boundaries imposed by the RMA and gathered further evidence to inform the decision. However, after a Court appeal by the applicants the Ministers decision was overturned (due to a point of law) and referred back to the Environment Court. Speculation that the Whanagamata case was instrumental in driving the RMA amendment which removed the Ministers powers around RCA has been widespread. Further consideration of the interview transcript has not shed any light on just how central this role was to the MCU, as a result the authors cannot speculate on what the impact of the recent amendments might be.

A further role of the MCU was to provide advice to Regional Conservancies and Local Government Authorities on particular issues as required. For regional conservancies, this may take the form of specialist planning knowledge or guidance on particular local consent issues. Many of the Conservancy staff are generalists with strong technical capacity and thus, at times, may require input from someone with more in depth RMA knowledge. Where Conservancies employ staff with planning experience members of the MCU encourage regular contact and information exchange. In the case of local government agencies, the MNU field questions over specific coastal management issues and concerns as well are requests for clarification around the NZCPS.

The MNU may also have a role (delegated form the Minister) in approving coastal plans and policy however this was not mentioned by the participants.

Similar to the Regional Conservancies, the MCU become involved in coastal management issues (outside of the RCA process) which they consider to be nationally important or impact on one of the Departments areas of interest. "We have tried to get involved in some high profile cases" mainly "because we might be able to get some good case law" which supports the sustainable management of the coastal environment. The focus on sustainable management rather than conservation was mentioned a number of times throughout the interview by several participants "We don't take a narrowly focused conservation view, we have conservation interests, but with the RMA we take a wider view". This was contrasted to many other groups in the Department who were able to solely take on a conservation advocate role. A lack of financial resources and time were the key factors which prevented the MCU from getting involved in all the coastal management issues which were of interest. They felt that as a result many "debates slip below the radar".

# 3.1.3 Summary of MCU role

The role of the MCU is not dissimilar to that of the conservancies; however, they have more specific duties around supporting the Minister's role in the RMA. In particular, around the management of RCA consent process and local government plans and policies. Coastal management issues are not perceived as a core responsibilities for the MCU "its not our accountability to sort out the coast .......the question is whose is it?"

#### 3.1.4 Comments on the NZCPS

Participants had a number of comments about the NZCPS.

Overall the participants thought the first NZCPS was good starting point considering that "it was formed by a committee" - a factor which was perceived to reduce the specific nature of any document due to the requirement for group consensus on content. The policies around natural character and coastal hazards were considered to be particularly progressive for their time. However, they did note that the first draft was "a bit more specific and targeted before it went through a board of inquiry" where it "got mellowed". Criticism regarding the lack of specificity of the NZCPS tended to come from Councils, who wanted additional guidance, and stakeholder groups who believed their area of interest was not given a high enough priority.

A number of the gaps in the original NZCPS should be closed in the revised document particularly the fact that seawalls are not automatically treated as RCA if they are under 300 m which means they can go through the coastal permit process with the relevant local authority. This comment cannot be qualified at the time of writing as the revised NZCPS has been through a Board of Inquiry and is still awaiting Ministerial sign off (or rewrite). As a result the exact contents of the document remain largely unknown.

#### 3.1.5 Is the Coast being managed well?

The participants were non-committal on how well they believed the coast was being managed. However, they did comment on some key issues and challenges with respect to coastal management:

How to manage political agendas at the local level, where politically driven conflict commonly affects the outcome of consent applications? Much of the conflict at the local level is around seawall construction to protect private property. "You often find that the Regional Council isn't keen but there is a strong push from the District Council who tend to perhaps pick up and push local groups' desires, they are a bit more politically based".

How local authorities can better manage local coastal management pressure within their current financial constraints? Many Councils have small rating bases and may be short of key pieces of technical information or community perspectives to inform decisions.

How to manage the pressures to sub-divide coastal land, especially in marginal or undeveloped areas?

Coastal management was believed to be further complicated by the general publics' confusion "around who does what" due to the separation of responsibility between different organisations around high mean water (see Figure 2). The fact that three different management authorities could be involved depending on where the activity took place with respect to MHWS was in the participants view poorly understood.

# 3.1.6 Relationships with the DoC Regional Conservancies

The MCU provide technical support and advice, where required they tend to have a strong relationship with the RMA planning staff in each conservancy, but less so with the technical staff. One participant observed that "we often have vigorous debates about matters with the

conservancies", but they often leave local issues to the Regional conservancies as they believe they have a greater connection with the local community and better grasp of local issues and conflicts. Although the MCU and regional conservancies do act together when necessary; it appears as though they have quite different tasks with respect to coastal management.

#### 3.1.7 Relationships with Local Councils

The relationship between Local Councils and the MCU typically revolves around the implementation of the NZCPS through the development of Council plans and policy or the RCA consent process. Council's will from time to time seek clarification or direction on particular NZCPS policies from the MCU. However, the contact is fairly minimal and the MCU would like to extend the interaction and relationships in the future.

In the participants view, the role of Councils is to manage the day to day issues and consents associated with the coast through their respective planning documents which are ultimately guided by the NZCPS. In essence, the role of the MNU and the Minister is to provide high level guidance through the NZCPS.

# 3.1.8 Ministry for the Environment

The participants had very limited contact with the Ministry for the Environment as they tend to leave coastal aspects of the RMA to DoC "Over the years MfE have tended to stay well away from the coast .... they certainly say it's your (DoC's) business". There was a general consensus that MfE tended to take a hands off approach to the RMA in general, as they have produced little in the way of national directives.

#### 3.1.9 NGO's and the public

The MNU often fields calls from the general public (or stakeholder groups/NGO's) with respect to particular RCA applications or decisions, although the contact is solely instigated by members of the public. In addition, many e-mails or letters are sent directly to the Minister.

# 3.1.10 Overall summary of DoC's perceived role in coastal management

DoC has a complex structure with regional and national components to its role in coastal management. Although the Minister of Conservation is charged with establishing and reviewing the NZCPS, involved with RCA consent process and signs off Council coastal plans and policy, the overall component of DoC's work with a coastal focus is very small. The participants held the view that MNU's role was largely administrative and they were not accountable (as an organisation) to sort out the coast. They assist in the provision of national direction through the NZCPS, and assign commissioners to RCA consent hearings, and facilitate the Minister decisions making on RCA and ensure the correct process is followed.

At the conservancy level, DoC becomes involved in local issues (sometimes as submitters) and supports the Ministers role in Coastal management where applicable.

Both the MCU and the local conservancy will become involved in a consent application as submitters, outside the RCA process, if they consider the issues to be of significance and if resources allow. Both groups expressed clear limits on their ability to get involved due to resources and time constraints.

It is interesting to note that both groups believed that DoC's focus in coastal management was on sustainable management and not purely conservation.

DoC's role may substantially change over the next few years as the implications of the RMA reform becomes more apparent.

# 3.2 Ministry for the Environment

The Ministry function is primarily high level policy design and advice (around science or policy) to the Minister for the Environment. In addition they are charged with a number of responsibilities under the RMA, primarily at the national level. The main office is in Wellington with smaller groups based in Auckland and Christchurch, as a result they do not have a regional presence.

From the participants' perspective MfE's key roles include the provision of advice and guidance to local authorities and the general public; monitoring topical environmental debates at both the international and national level; meeting key responsibilities under the RMA.

A key role was the provision of advice and interpretation of science to enable policy makers to develop sound and appropriate policy at the national level. This can take any form and is usually around highly topical political issues. "We provide advice or science advice to policy makers through translating the science and feeding it into policy development".

At the regional or district level, guidance is available for local authorities or decision makers (i.e., council staff, elected representative or commissioners) on how to implement the RMA. This includes the provision of training (e.g., the "Making good decisions programme" which provides training for hearings commissioners) or supply of information and toolkits to Local Authorities to enable them to make better decisions, for example 'Climate change and coastal hazards: a guidance manual for local government' (for a complete see <a href="http://www.mfe.govt.nz/publications/a-to-z.html">http://www.mfe.govt.nz/publications/a-to-z.html</a>). The information and toolkits generally serve to interpret scientific and technical information in a way which is useful in day to day resource management decisions. In addition, limited advice and guidance is provided for resource consent applicants and the general public on RMA process and good practice (see <a href="http://www.mfe.govt.nz/publications/a-to-z.html">http://www.mfe.govt.nz/publications/a-to-z.html</a>). All the material is prepared as "high level information which applies right across the country" and left to individual agencies or groups to establish how it is relevant for them.

Another function of the Ministry is to provide additional resources to 'poorer Councils' to facilitate the generation of good science relevant to resource management issues or improve the quality of local decision making.

As a result of their role in advising the Minister for the Environment, MfE is required to monitor international issues, particularly issue which are likely to impact on New Zealand (e.g. climate change). Moreover, they have to keep a "political eye" on issues within New Zealand. Many of the issues they become involved with are driven by political will.

In parallel with the previously described roles, the Ministry has a number of responsibilities under the RMA which revolve around creating national environmental standards and managing the call-in process. In October 2009, the Environmental Protection Agency (EPA) was created within, and resourced by, MfE. At the time of the interviews this had not yet occurred, although rumours were present; "There is talk of setting up an EPA type set up in which the really tough management decisions are taken away from the Regional Councils and operated at a more national level". In essence, the EPA will take over the majority of MfE's current powers around National standards and policies and call-ins.

Although MfE does have the ability to establish National Environmental Standards (NES) or National Policy Statements (NPS), none were in existence at the time of the interviews other than the NZCPS. However, participants speculated that this was likely to change in the future, particularly with respect to water management. It is important to note that with respect to the NZCPS, MfE have commented on the revised NZCPS, but have only as much influence as any other submitter (including the general public) – "Some of our suggestions were taken on board some were quite roundly ignored". Participants did not see their role in coastal management expanding beyond this in the future with the possible exception of coastal climate change related issues. It is important to note, that any future NES or NPS may have some bearing on the NZCPS and implications for the implementation at the regional and district level.

Pre-October 2009, MfE had the ability to call-in certain resource consent applications if they were perceived to be in the national interest. However the newly created EPA (which may or may not remain within MfE) has taken over this role.

Overall, coastal management is not a strong focus for the Ministry. Constraints on their role in coastal issues include budgets, finding the right people for the job, and competing issues for these resources. Their interests lie primarily in coastal hazard management, climate change and water quality.

#### 3.2.1 Is the coast managed well?

Participants did not believe that the coast is currently managed well because:

- The management is too disjointed and there is an artificial boundary at mean high water spring, which conflicts with coastal processes which do not recognise this management boundary. Such a boundary does not operate in practice from a management perspective either. "Sand doesn't stop at the mean high water spring it goes on up to the sand dunes ......it provides a demarcation which is not consistent with how things actually happen on the ground".
- The demarcation of responsibility is difficult as plans and policy on one side of the MHWS maybe different to another. Regional and District Councils and DoC may not be well aligned, "they (Councils) can have completely inconsistent sets of plans addressing one side or other of the coastal marina area boundary".
- Conflicts can be complicated if the area occurs at a boundary between several local authorities. For example, rivers or estuaries often mark Regional Council Boundaries (e.g., Kaipara and Mangawhai harbour entrances mark the boundaries of Auckland Regional Council and Northland Regional Council).
- Councils have to deal with difficult issues with little or no national guidelines other than the NZCPS. This can often leave them with little sense of direction and may lead to

capture by special interest groups.

- Local authorities illustrate various levels of success in adequately giving effect to the NZCPS in their plans and polices. In some cases "the NZCPS is ignored for both the regional policy statement and for consent processing following that". This may be picked up as the plans and policies are audited by either DoC or MfE.
- The scientific evidence to support good decisions is sometimes lacking. This means
  Councils may hesitate with, or simply avoid, some decisions particularly those which
  could create some form of liability either in the Environment Court or elsewhere.

## 3.2.2 Relationship with the Department of Conservation

Contact with the Department of Conservation is limited with respect to coastal management issues. In essence, the participants expressed a belief the NZCPS and coastal management issues was DoC's domain, unless it overlapped with any future NES or NPS coastal hazards or climate change issues.

# 3.2.3 Relationship with other government ministries and professional organisations

MfE tend to deal with a select group of stakeholders, including Local Authorities, professional associations like the Resource Management Law Association, Local Government NZ, engineering bodies and insurance companies. Interaction with these groups occurs because they are perceived to have a strong influence on environmental outcomes because they are involved with key resource management decisions. Very little interaction has occurred around coastal management issues unless they are related to the potential impacts of climate change.

# 3.2.4 Relationship with Local Authorities

Relationships between MfE and local authorities are variable in both nature and quality. The participants believed it was MfEs' role to support and facilitate good resource management decisions through general advice, guidelines and information provision. "Mostly we are feeding information to them (Councils) but we do get feedback on what they still require". In addition MfE is available to assist with information inquires on request. However, they do not see it as their role to specially tailor the national level information to suit particular local contexts; they believe that is up to the Council. "They (Councils) need to make informed decisions for the benefit of their community".

# 3.2.5 Relationship with the general public and NGO's

The relationship between MfE and the general public and NGO's is fairly limited as they do not have regional offices or an on the ground operational role. MfE runs an annual Environment Roadshow which sets out to engage with the public on particular discussion topics. This road show brings a number of MfE staff to regional and provincial centres to encourage and facilitate public discussion on a number of topical issues. Another form of contact (a formal line of enquiry) occurs when a member of the public writes to the Minister for the Environment (or their local MP) asking specific questions. These are then passed on to MfE to answer. More informal contact is established through a phone call or an e-mail from a member of the public.

From a funding perspective, the Ministry operates a fund which provides financial assistance (up to \$40, 000) for community groups advocating for environmental issues of national significant at the environment court or board of inquiry level. This fund is especially relevant for the consent hearings which are called-in:

(see <a href="http://www.mfe.govt.nz/withyou/funding/ela.html">http://www.mfe.govt.nz/withyou/funding/ela.html</a>).

Overall, the participants believed that the public had other avenues to pursue coastal management issues other than through MfE. In particular, by getting involved in the preparation of local planning documents as provided for under the RMA and Local Government Act.

# 3.3 An NGO perspective: Environmental Defence Society

The Environmental Defence Society (EDS) is a small association of professionals who use their skills and resources to achieve what they consider best practice environmental outcomes. This is through providing:

Legal expertise to either peruse the society's goals or support community groups; "we have a very active litigation programme on coastal development..... our focus has really been on landscape natural character issues and we're starting to get involved in coastal hazard issues".

Information targeted at community groups, local government, Environment Court judges etc. This information is either in the form of one-on-one advice, publications (of which there are numerous), guidelines, and holding conferences. A book around coastal development has recently been completed called "Castles in the Sand" (Peart, 2009). A special interest for EDS is coastal development particularly of previously sub-divided locations.

Advice to community groups, or fielding general resource management enquiries. EDS regularly receive enquires from individuals or community groups "if it's a very local issue we might give them advice over the phone ...if it's a significant issues we might get involved ...bring in a lawyer or help provide experts to support the case".

Pressure on the Government to change to resource management legislation or poor court decisions. In particular, to act over the coastal development pressures.

EDS tends to get involved where they feel natural character of the landscape, flora and fauna, public access, historic heritage, race relations for Maori with the coastal water quality and coastal hazards are affected. They take a national perspective and are prepared to take issues to the highest level of appeal. However, they do have to "pick their battles" due to sparse resources, in spite of many of their members donating time. This normally means significant issues are tackled rather than small local issues. Overall, EDS sees itself as a national level advocate for good environmental outcomes and sets out to represent (or support others who represent) these outcomes in hearings where they are not otherwise present.

# 3.3.1 Is coastal management working well?

In general, the participants suggested that coastal management is not currently working particularly well and "has been largely infective" for a variety of reasons:

- The NZPCS is "too vague and doesn't have any teeth". Councils are not provided with any guidance on how they might achieve any of the policies and "it doesn't really take you a lot further than Section 6 of the RMA". EDS are strong advocates for greater national direction for all environmental management issues because they feel the current amount of flexibly leads to some very poor decisions. However, they acknowledge that the NZCPS has provided some guidance, they would just like to see more!
- One of the participants suggested the 1994 version "didn't illustrate any understanding of coastal development pressures or the factors which were driving it". This makes it hard to manage the influx of coastal sub-division consents which were logged over the last decade or so. Often Councils with small rating bases face enormous pressure for coastal development which they frequently don't resist because it effectively increases their rate take.
- There is a belief that the 1994 NZCPS is written by "ecologists rather than Planners" which means that many of the factors which drive coastal issues are not well accounted for from a planning or environmental management perspective. In addition, it is a "politically difficult document" which the Department of Conservation is trying to develop "with limited experience of planning and planning related issues". It is interesting to note that the revised draft version was written by a committee which included coastal planning experts. However, the draft version has been modified by the Board of Inquiry and is yet to be modified or signed off by the Minister of Conservation. Once a document has moved through this process it original content is very likely to have been "watered down".
- Coastal development is essentially a "free for all" there is no overarching strategic plan. EDS advocate for a partnership between central and local government to manage the coastal area to provide "a more strategic framework ... which would identify areas which could be developed and areas that cannot be developed and could stay rural and cannot be sub-divided". This partnership would act like a watch-dog and oversee coastal management. "Under the RMA at the moment we just have this total deregulated system no watch dog, no oversight ... Regional Councils could do it but don't, DoC could do it but don't, so its just asking for disaster". Moreover, Central Government would support, and potentially contribute resources to back up, good Council decisions this is different to what is in place now.
- Current management arrangements do not fully account for the tension between national, regional and local interests with respect to the distribution of benefits and costs associated with coastal management alternatives. If decisions are left with local communities, regional and national interests may be given lower priority due to a potentially different set of drivers operating at the local level. This effect is likely to be amplified if national or regional interest can only be achieved at the cost of the local community. For example, is it fair for small Coromandel communities to pay for protected areas to partially benefit those who live in other parts of the country? "You have got to provide funding (from either Central government or collaboration of Councils) if its of national interest you can't expect the local rate payer to pay for it". Without funding, local communities will support the most favourable outcome for them irrespective of wider interests. Such a localised perspective may not always be in the best interests of the country as a whole.

The revised NZCPS is predicted to be "an incremental improvement, so we will get something that is worded a bit differently but will be much the same kind of approach and so will have much the same effect".

# 3.3.2 Relationship with Ministry for the Environment and Department of Conservation

From an EDS perspective, the relationships with the Ministry for the Environment and Department of Conservation are very limited. Interaction with DoC is restricted to submissions on the revised NZCPS or other conservation related issues and co-involvement in resource consent hearings. EDS believe that DoC is not effectively using its legally defined ability to influence coastal management through the NZCPS.

# 3.3.3 Relationships with Community groups and other NGO's

EDS believes that effective community groups can influence policy in the long term, and cites activities by the Waitakere Ranges Protection Society. As one example. WRPS have a long association and history of opposing all consents they disagree with in the area. The group has the skills to have an impact and strong links with a number of professionals who lend time and expertise. They strongly support the Coast Care initiative and believe it is a good way for people to learn more about their beach and the dynamic coastal environment.

A key role for EDS is to support local communities where requested especially if the groups objective align with their perspective on national interest and achieving good environmental outcomes.

## 3.3.4 Relationships with Local Authorities

EDS has little interaction with local authorities outside of the RMA or LGA submission process for plans and policies or the resource consent process. In some cases EDS may contribute knowledge and comment on a specific policy. One of the participants believed the Regional Council role has enormous potential for good environmental management because it takes a "catchment to the sea approach ..... it is unique in the world, I don't think I have seen it anywhere else". However the potential hasn't been fully utilised as yet because in order to do that it needs strong, more proscriptive regional planning. They believe Regional and District Councils vary enormously in their ability and skills to deal with coastal issues.

From an EDS standpoint, the relationships between, and even within, resource management authorities are fraught with conflict:

- Each local authority perceives their role slightly differently and some District Councils
  believe they are there to facilitate development. For example, Councils without a large
  urban population and shrinking rating base are "often desperate for development and
  money", this can affect their perspective on consent applications. However, there have
  been improvements over the last few years with an increasing alignment in perception of
  roles and responsibilities.
- The Local Government Act (2002) complicates the role of different local authorities because it does not create a distinction between Regional and District Councils which are both charged with environment, social, economic and cultural wellbeing. This may lead to Councils losing focus and duplicating services and activities.

# 3.4 District and Regional Councils

Local Authorities produce policies and plans which must give effect to the NZCPS and manage the day to day implementation of the RMA. A key boundary for coastal management is the MHWS. Consent applications which fall below the MHWS, and are not classified as RCA, are heard by a Regional Council as a coastal consent application. Any activity which pertains to land use and is above the MHWS is the domain of a District Council. Although Regional and District Councils have differing responsibilities for coastal management under the RMA they both face pressures from lobby groups, budgets, competing issues, staff skill base and internal conflicts when a coastal erosion event occurs. It is interesting to note, that both organisations see their role as facilitating the sustainable management of the coast.

This information is based on a series of interviews with both Regional and District Council staff who held planning or science roles within their respective organisations. All of the participants believed that coastal management is becoming more challenging because of the high value of coastal property and the competing demands made on the coastal marine area. Moreover, they believe that complexity will increase over time as coastal space becomes increasingly precious and the impacts of climate change begin to appear.

# 3.4.1 Is coastal management working well?

Several participants felt that responses to coastal management are currently knee jerk reactions rather than anything strategic or proactive. Ad-hoc responses tend to lead to ad-hoc results with no thought given to the overall cumulative impact of any given decisions. "Councils struggle to think in the long term about what to do about the coastal margin" this is reflected in the decisions which are made.

Councils often must deal with communities who's first response to an erosion event is to call for a rock wall and don't see the relevance of any alternatives. This is a culture some participants are working hard to change although it is proving to be very challenging as at many locations precedents have already been set (i.e., rock walls to protect private property from erosion). It is very difficult to argue for soft engineering options in one community when a rock wall was constructed a few years earlier nearby.

Council staff are charged with managing environmental, social and environmental aspects of resource management in a highly political environment. They provide advice to the consent hearings panel (in the form of a staff report) which details what they perceive to be the best solution, however, the politicians make the final decision. Members of the panel may have their own agenda's "some have got the community interest quite strongly at heart while others are pursuing their own agenda". This may result in political goals taking precedent over more pragmatic solutions based on the relevant planning documents. This is a constant source of frustration for many of the participants. In addition, solutions may often reflect particular local interests and may not always reflect wider regional or national interest.

Internal conflict between different Council departments, who may not be in agreement over the best solution to a coastal erosion issue, complicates the process of finding resolution. For example, differences between coastal scientists and engineers over hard (rocks) verse soft engineering solutions.

For many smaller Councils, access to adequate scientific information on which to base decisions is a significant barrier to good coastal management. In some cases "our information and knowledge base on the behaviour of coastal systems form the point of view of being able to predict or forecast likely possibilities including hazard risk is so low, it's terrible". It is very difficult to obtain resources to fill these key knowledge gaps as the Council has a number of competing priorities.

There is no national perspective on planning or managing the coast. A participant suggested that "under the RMA at the moment we just have this total delegated system, no watchdog, no oversight". They believed that existing legislation does allow for a watchdog role from the Regional Councils and DOC at a regional level and national level respectively. However, noone seems to be taking this responsibility so there is essentially nothing other than the NZCPS.

Regional Councils do have the potential (under the RMA) to manage resources from a whole catchments perspective, however they tend not to. One of the participants believed that "what we need is much stronger Regional Councils and much stronger strategic regional planning that would give much stronger guidance to Local Councils". It is interesting to note, that another participant expressed the view that more proscriptive plans and policies were considerably harder to get operational due to challenges from different stakeholder groups.

Numerous viewpoints on the current NZCPS were expressed by participants:

- One participant considered that the NZCPS "has been largely ineffective...... it says all the right things ....but it's too vague". However, another participant believed that the perceived vagueness of the document was deliberate and occurred because New Zealand's regions are so varied that it is difficult to construct a document which is more proscriptive and applicable to all situations. A further suggestion was that DoC lacks the resources or capacity to provide any more detailed relevant guidance at the local level. A perceived solution to this was some sort of partnership between central and local government to management coastal issues.
- It has very little value in actually assisting with policy on the ground. One participant believed that "it doesn't really show any great understanding of the nature of coastal development and what is driving it and how you try and manage it on the ground. So it doesn't really front up to the issue of managing coastal development". By not fully accounting for the factors which drive coastal management the NZCPS is little help in formulating policy and backing up key local decisions.
- The NZCPS illustrates a lack of understanding of local issues at the national level. It was suggested that "because the NZCPS is not written by planners who are at the coal face of resource management, there is little idea over how to apply the ideas. It is more written at the Section 6 level" (i.e. a very high level broad set of statements which are deemed to be nationally important). As a result the policies have no real relevance at the local level.

All of the participants felt the coast was not currently being managed particularly well.

#### 3.4.2 Perceived roles of other organisations

An interesting point made by one participant was that at the local level both MfE and DoC will be just "bystanders" or "just another stakeholder" unless more guidance is provided under a 'tighter' NZCPS or national environmental standard. However, there was some

contention over how appropriate and relevant tighter guidelines may be given the lack of local context and understanding previously demonstrated at the national level.

Community and local stakeholders are key factors in determining environmental outcomes through lobby groups, submissions on plans and policies and Council consultation. In addition, local politicians pay particular attention to the perspectives of ratepayers and lobby groups which give these groups a strong say in coastal management.

#### 3.4.3 Relationships with other organisations

Relationships and interaction with Central Government agencies are limited. MfE tends to provide general advice on RMA process and DoC will respond as a submitter on consent applications. The most frequent interactions are with community groups where the contact is constant and diverse, it may take the form of formal consultation, lobby groups, personal contact etc. Relationships with other local authorities may be through discussion around shared issues, formal contact for resource consent processes or membership of professional organisations.

#### 3.5 Coastal consultants

New Zealand has quite a number of coastal consultants either within large environmental consultant firms, smaller companies or in individual private practices. These consultants come from a range of disciplines including planning, coastal science or engineering. They may consult to Councils, central government ministries /departments, community groups or individuals in a range of capacities including assisting with policy and plan design, support or representation at consent hearings, erosion mitigation strategy design, on the ground management of coastal management decisions/conflicts, interaction with or management of community care groups. Their exact role is dictated by the client.

This range of roles and activities presents quite a diverse set of options on coastal management in New Zealand. Information presented here has been drawn from several interviews with participants with a planning or coastal science background. As a result a coastal engineer's perspective is not likely to be represented.

#### 3.5.1 Is coastal management working well?

Participants believed that some aspects of coastal management were working well and others not so well. Some of the key problems identified include:

- Participants felt that there was a lack of a national overview for resource management agencies charged with coastal management and "absence of a bigger picture". The NZCPS is a guiding document at the national level, and its role is not to prescribe processes or outcomes, However, "there is a balance between providing a strong lead or guidance and allowing Councils some room to manoeuvre in terms of their own drivers at a very local or regional level". How well the first NZCPS statement reflects this balance is constantly debated.
- Production of the NZCPS is out of step with Council Plan and Regional Policy Statement preparation. Although a new NZCPS is in preparation, so too are the second generation Council plans and policies. As a result, the new documents may therefore not fully account for the new NZCPS until some later revision. In addition because "policy and plan development is so ponderous... they are already out of date by the time you get them operational". In other words, these documents do not keep up with the changing

pressure on the coast, in particular a greater pressure for coastal property and new subdivisions, more New Zealanders with boats who want more access points, increased awareness of the value of undeveloped coastlines.

- A significant problem exists over management of resources over mean high water spring.
   This is a problem because issues are connected and physical processes do not respect management demarcation lines.
- The ability to make good decisions is strongly linked to local authorities access to technical knowledge and expertise. This is often a function of resourcing i.e., rating base and competing priorities. In addition "unless you have got that science advice that is helping you out the planners get very influenced by community pressure and political pressures".
- Council plans and policies may not be fully taken into account when making resource
  consent decisions. One of the participants believed that it was considered acceptable for
  local authorities to make a decision which was inconsistent with their policy or plan
  proved they listed the reasons for this choice. "You don't really have to take too much
  notice of them ... make up your mind as you go along".
- There is "an underlying assumption that RMA is developer driven ... we will wait and see and then we will manage the effects afterwards". In essence, a view that the impacts of coastal development could be mitigated which may not be the case.
- There are a number of loop holes which allow the coastal armouring at the land owner's discretion without any consultation or discussion with the wider community.
- Lobby groups have the ability to strongly influence outcomes if the Councils do not stand
  up to them. The outcomes of coastal erosion management decisions are frequently
  dominated by a well-connected powerful lobby group at the expense of wider community
  interests.
- Cumulative effects and impacts with a time lag are not currently well managed.

#### Things that are working well include:

- The first NZCPS (1994) may not be as relevant as it once was, but it initially had a huge impact on the development of coastal plans and overall coastal management. However, the new NZCPS will provide more guidance than the previous version. A lot of unanticipated change and development has occurred in the coastal area producing new pressure for Councils to manage and these will be accounted for in the new document.
- The ability of local communities to become involved in local decision making on coastal management issues is working well. People are able to express their opinions through submissions to plans, policies and hearings and be heard. Local values hold weight under the RMA and the LGA.
- Coast Care groups are operating well and achieving considerable success in some areas.
- The RMA allows for erosion mitigation strategies to be negotiated with all stakeholder groups. There have been some win-win solutions reached under the RMA in the last decade.
- Coastal hazard management and the implementation of coastal setback margins in new
  developments have increased considerably under the RMA. As a result future hazard
  management in new sub-divisions will be potentially less complex as there is plenty of
  land between private property and the sea.

#### 3.5.2 Relationships with other agencies, communities groups and NGO's

This is highly dependent on the consultants training and the capacity in which they are employed. In general, links with government agencies are limited, and local authorities and community groups or NGO's may either be partners or opponents.

#### 3.5.3 Perceived role of other organisations in coastal management

The Department of Conservation has a strong role in coastal management due to the provision of national level guidance through the preparation of the NZCPS and the Ministers role as final decision maker for RCA applications. They are also able to act as submitters on any other resource consent application. In short, participants perceived that DoC has potentially the most influence on coastal management in New Zealand.

The Ministry for the Environment was considered to take a very hands off approach to environmental management including coastal management issues "MfE seems to see DoC as being solely in charge of managing the coast though the NZCPS".

Local authorities have a key role in coastal management. District Councils in particular because the landward side of MHWS is where all the development pressures occur. One participant considered this to be a key role for District Councils although "... they don't seem to see it that way at all".

Community groups and NGO's can have a significant impact on local coastal management decisions though involvement in resource consent submissions and coast care groups. Their role is to provide further local context to the decision making process.

The role of the Environment Court on establishing case law cannot be underestimated because of the bearing it has on future outcomes. No other groups of participants held this view, perhaps as coastal consultant regularly participate in Environment Court hearings.

#### 3.6 Key themes

One of the most significant findings of this research is that participants were in general agreement that the coast was not being managed well. Moreover, the reasons behind this view were very similar and based around:

Lack of a clear national directive for coastal management and poor representation of regional or national interests, an absence of long term planning or consideration of cumulative impact of erosion mitigation strategies, poor on the ground implementation of the NZCPS, confusing management boundaries which are not aligned well with natural processes, power imbalances in local decision making, loop holes in the planning documents, and resourcing and information gaps for some local authorities.

#### 3.6.1 Lack of a clear national level directive

The majority of the participants believed the NZCPS to be vague and largely ineffective as an overarching policy guidance document. There are two clear divisions in the opinions of participants; First that vague is appropriate because it provides enough scope for local authorities to make the policies relevant to their local context. By being vague it remains applicable to the diverse physical coastal environment as well as pristine and highly modified

environments; Second, that it is too vague to provide any guidance on particular issues or to appropriately back up local authority decisions. Many councils have suggested that a stronger more specific NZCPS would make coastal management decisions considerably easier. However, given the political nature of the document and the fact that it is written by a committee, is open for public critique (via submissions) and the scrutiny of a Board or Inquiry subsequent to consideration (and further modification) by the Minister of Conservation prior to sign off, it is not surprising that the final product is "vague". It is important to note, that the 1994 NZCPS was the first of its kind and a number of social, economic and political pressures on the coast have considerably intensified in the innerving years - in particular, coastal development. As the revised NZCPS has not been released or signed off, it is not possible to establish if the second version will be substantially different.

#### 3.6.2 Who represents the national interest?

A key question raised during this research was — who represents that national (or even regional) interest<sup>10</sup>? This is a difficult question to answer because the guiding national level policy document was largely deemed inadequate and there was a mismatch between the assumptions around which agency had a national level advocacy role and which organisation actually assumed the responsibility. Why the national interest is important is discussed in more detail in Blackett et al. (2010) but it revolves around the values which all New Zealanders hold with respect to the coastline and more specifically the beaches. If wider interests are not considered then it is possible that a number of decisions which degrade the overall value of the coastline could occur. For example, in the case of the Coromandel Peninsular a local decision making focus frequently leads to erosion mitigation strategies which involve shoreline armouring. If each case is taken on its own (i.e., no assessment of cumulative impacts) then large areas of the coast may become armoured which would significantly impact what the country as a whole values — sandy beaches (Blackett et al., 2010).

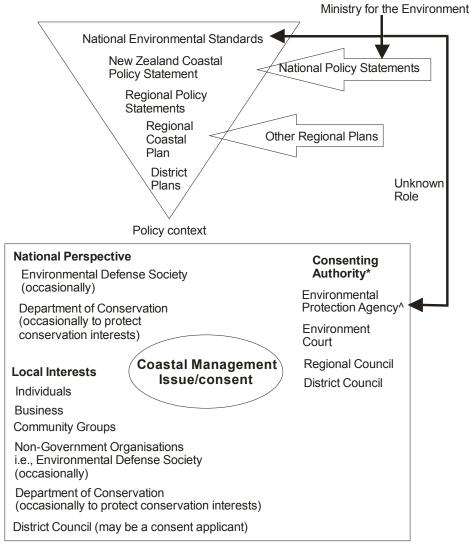
Overall, the NZCPS was not considered to be a document which represented the national interest in coastal resource consent applications. This was primarily as it was thought to be vague and its effectiveness was operationalised through local authority plans and policies. Participants felt that it was quite common to ignore wider interests in the outcome of a particular resource consent hearing and focus on local issues and conflicts.

All participants were asked about their own role in coastal management and the role they perceived other agencies to hold. Almost all of the participants believed the national level advocacy role fell to DoC, either directly or through the creation of the NZCPS. However, DoC expressed their role in terms of supporting the responsibilities of their Minister (under the RMA), to help create the NZCPS and then become involved in highly significant issues where resources allowed. Another interesting point is, that contrary to general perception when approaching coastal erosion issues DoC take a sustainable management perspective rather than the conservation focus which they bring to other public forums. With the exception of when erosion threatens other conservation interests for example Banded Dotterel nesting sites.

<sup>&</sup>lt;sup>10</sup> Where national or regional interest is described as being that of parties who do not live in the immediate area but hold an interest in the outcome of resource consent decisions. An example would be those who lived out of town but visited and valued a particular beach for recreation.

MfE were not considered to be particularly relevant to coastal issues. Several times they were referred to as "bystanders". However, the formation of the EPA may have some impact on MfE's involvement, but this remains to be seen.

Local authorities were perceived to be responsible for the day to day management of coastal issues, but were recognised to be constrained to a highly local perspective, These constraints were thought to occur due to their proximity to local politics (particular the District Councils) their perceived role under the RMA and in many cases the lack of a regional vision on coastal management or access to good technical information to inform decisions. The roles of the various organisations in this study are summarised in Figure 3.



<sup>\*</sup> Depends on location with respect to mean high water and level of national importance.

**Figure 3** The respective roles of the organisations involved in this study.

It is clear, that in many cases national or regional level interests are perceived as "someone else's job" and typically fall to either community groups or NGO's like EDS. If these groups do not become involved (typically due to financial constraints), then national or regional interests in coastal erosion mitigation strategies may be excluded from the resource consent

<sup>^</sup> How this works and what role the EPA will have remains to be seen.

process which leaves the process dominated by highly local, frequently development oriented, issues. This is perfectly acceptable if the interests align, with wider values, however, evidence suggests that if wider interests are not represented then outcomes tend to involve around shoreline armouring (Blackett et al. 2010). An outcome which is against what New Zealand professes to want for the coastal environment.

#### 3.6.3 Absence of long term planning or consideration of cumulative impacts

There doesn't appear to be any long term planning or consideration of cumulative impacts at either the national or regional level. In other words key discussions around what parts of the coast should be left as they are (i.e., not armoured or left undeveloped) has not occurred at any level of governance. Each case is considered under the RMA on its merits. Although this effect based approach does have it advantages, there is an underlying assumption that anything can occur anywhere provided the impacts can be appropriately mitigated. Such an ad-hoc approach to coastal erosion management could lead to a highly modified coast.

#### 3.6.4 Poor on the ground implementation of the NZCPS

Several participants criticised the translation of key NZCPS policies through Council Rules into practice at resource consent hearings. In short, some Councils have a number of policies and plans in place which provide guidance on coastal management issues which give effect to the NZCPS but are not accounted for during the assessment of individual resource consent applications. Plans and policies are audited for consistency with the NZCSP, however, what are the checks on how these are employed in practice? Are the final outcomes consistent with local rules and the NZCPS or are mitigating circumstances cited as requiring a different outcome? Participants believed that many outcomes were in conflict with plans, particularly in the case of constructing sea walls to protect private property.

Blackett et al. (2010) provide further discussion on what factors influences the choice of erosion mitigation strategy, most of them are unrelated to planning and policy documents.

# 3.7 Planning boundaries are confusing and poorly aligned with natural process

Coastal permits are different to other resource consent applications in several ways, first an activity must be listed in plans to be allowed which is the opposite to land and water rules which are more permissive; second, there are a number of agencies who could potentially hear the application depending on its location with respect to MHWS and its classification (i.e., RCA or not). The subtleties are confusing to get to grips with – particularly for applicants or submitters who may have little prior experience. This complexity has been increased by the October 2009 amendments where by a coastal matter may be called in as well or skip straight to the environment court depending on its significance.

In addition, the MHWS boundary that determines which agency is involved (i.e., Regional or District Council) may be convenient for demarcation but natural process occur across this boundary. The boundary is not always easy to locate and will shift over time with changing geomorphological process (e.g., erosion or accretion) or climate change.

# 3.8 Loop holes in the RMA

There are a number of loop holes present in the NZCPS level and a number of local planning and policy documents which allow shoreline armouring to occur without resource consent. These are usually either because they are only short stretches of land or are above MHWS on private property. Loop holes of this nature facilitate shoreline armouring by land owners in the absence of wiser consideration of the appropriateness of such an erosion mitigation strategy.

A further concern was that existing land uses or engineering structures set precedents which were very hard to overturn in favour of other erosion mitigation options. For example, if an old seawall is in place, replacing this structure with beach renourishment or dune planting is considerably more difficult than if the erosion had just occurred. This is probably because the option is very entrenched and locals, particularly beach front land owners, are fearful of the consequences.

# 3.9 Power issues – developers vs. communities

Most of the participants believe that local development pressure or private property interest tend to win out over protection of beaches from either sub-division or rock wall structures. This may be due to power and financial resource imbalances between applicants and local communities or the fact that the Local Council is driven to increase its rating base. Several participants felt that the progressive development or armouring of shorelines was very difficult to successfully oppose. We have no evidence to support this belief.

# 3.10 Resourcing and information needs for smaller Councils

It is difficult for under-resourced Councils to obtain the necessary guidance or scientific input to make fully informed decisions. This has surfaced in previous work (see Blackett et al. 2010) and is clearly an on-going issue which has not been resolved. A lack of good technical information tends to lead to capture by lobby groups and engineering based solutions to coastal erosion (Blackett et al. 2010).

#### 3.11 Weak relationships between coastal management agencies

There appear to be three categories of organisations involved in coastal governance – policy/plan writers, submitters and management agencies (those who hear consent applications). However, these roles shift depending on the nature (whether it's an RCA or not) and location (with respect to MHWS) of the activity in question, or the policy or plan under review. The only exceptions are NGO's (i.e., EDS) and local community groups and coastal consultants. The first two are almost always submitters on consent applications or planning documents and consultants may provide technical information to any party on a contractual basis. Each organisation has its own (perceived) role and a strong view on what the others should be doing and typically have weak (often issues based) links to any of the other organisations.

The weak relationships, mismatched perceptions of roles and responsibilities and shifting roles do not contribute to cohesive and co-coordinated coastal management. It favours, adhoc, place based and issue driven solutions.

# 3.12 What will the changes in the RMA mean?

As the interviews for this research were predominantly complete prior to the October 2009 RMA amendments, the authors were unable to obtain a comprehensive perspective on how participants believed the amendments would affect coastal management, particularly coastal erosion. However, some speculations can be made:

Community involvement in consent decisions may be impacted by any hearings that move straight to the Environment Court, or if there is a risk that cost could be awarded against them. An appearance at the Environment Court is both daunting, and expensive. It is daunting for community groups from the perspective that it is a legal forum, were lawyers are able to cross examine witnesses and anecdotal claims tend to have low value (Blackett & Hume 2010 a). Moreover it is expensive, because hiring a lawyer and consultants is strongly advisable in order to make a strong case (Blackett & Hume 2010 a). A weak case may potentially lead to costs being awarded against the group, particularly if their submission is classified as vexatious.

The removal of the Minister of Conservation as the final decisions on RCA applications will alter DoC's role in the process and restrict their involvement to creating the NZCPS. One participant suggested that final decision will be legally based and perhaps lacking the social or political awareness which a Minister would provide.

#### 4.0 FUTURE WORK

This research has uncovered a wealth of information on numerous issues and challenges associated with coastal erosion management as well as coastal governance in New Zealand. These findings need further integration with the wider national and international literature in order to provide a more robust discussion of the key issues. This can be followed up in subsequent publications.

As the RMA is due to undergo a further round of amendments in the near future, this information forms a baseline perspective against the success of future changes. It will be important to monitor the implementation of the up-coming changes and the impact of the new NZCPS.

#### 4.1 Conclusions

The vast majority of participants did not believe that the coastal environment was currently being well managed in a way which achieved the purposes and principles of the RMA. Both national level guidance and representation of regional or national interest were considered absent in the day to day governance of the New Zealand coast. The presence of an overarching NZCPS was not considered to be very effective at defining national interest or providing clear guidance as it was too vague and frequently obscured by local level issues and conflicts. Moreover, there was no clear agreement among the participants as to who should move to fill the gap. The different agencies tend not to step outside their perceived roles and felt that others should step up and assume the national level responsibility. DoC was the agency most commonly cited as holding a key national role, however the DoC participants did not completely agree. Outside of their responsibility to produce a NZCPS, they were seldom involved in coastal decision making. As a result, NGO's and community groups appear to be those who fulfil the role of representing wider interests, however, similar

to all the other agencies involved in coastal management they were financially constrained and forced to choose which issues to become involved in.

It appears as if the key management agencies have weak connections with each other, and illustrate different perceptions over who fulfils what role. This does not provide a good base for integrated and cohesive coastal management. Instead it promotes ad-hoc, locally driven decisions, something which was observed by most participants.

In short, the current governance structure for coastal management in New Zealand is not working in the co-ordinated manner directed by the RMA. There are simply too many variable factors which affect the on the ground outcome and tend to result in ad-hoc decisions with limited consideration giver to wider issues, concerns and values, and cumulative impacts. Perhaps the most pressing issue is to consolidate the national directive and clearly appoint an agency with an overseeing responsibly. In an ideal world, this agency (EDS call it a coastal commission) would be solely in charge of overseeing coastal management and not face similar resource allocation decisions to DoC.

#### 5.0 ACKNOWLEDGEMENTS

This work was funded by the NZ Foundation for Research Science and Technology under subcontract to GNS Science in the programme Geological Hazards and Society (Contract C05X0402), Objective 1, Land use planning for reduction and recovery.

The authors would like to thank the participants for their time and in-depth responses. Lyn Hanes and Darcel Rickard for transcriptions. Darcel Rickard for preliminary data analysis.

#### 6.0 REFERENCES

- Blackett, P., & Hume, T. (2006). *Community involvement in coastal hazard mitigation: An initial scoping of process and pitfalls* (NIWA Client Report, prepared for GNS Science No. Ham2006-083). Hamilton: NIWA.
- Blackett, P., & Hume, T. (2007). *Community involvement in coastal hazard mitigation: Some insights into process and pitfalls*. Paper presented at the New Zealand Planning Institute, Palmerston North 27th-30th March.
- Blackett, P., Hume, T., & Dahm, J. (2010). Exploring the social context of coastal erosion management in New Zealand: What factors drive environmental outcome. . *Australasian Journal of Disaster and Trauma Studies*, 1.
- Blackett, P., & Hume, T. (2010a). Community perceptions of engineering solutions to combat coastal erosions at Ruby Bay/Mapua and Marahau. (Client Report). Wellington: NIWA.
- Department of Conservation. (1994). *New Zealand Coastal Policy Statement*. Wellington: Department of Conservation.
- Department of Conservation Policy Group. (2008). *Proposed New Zealand coastal policy statement 2008*. Wellington: Department of Conservation
- Gregory, D. (2008). 'There is a tide': An examination of the evolution of New Zealand Coastal Policy Statements. *New Zealand Geographer, 64*(2), 144-153

- Isaac, A. (1997). The Cave Creek Incident: a REASONed Explanation. *Australasian Journal of Disaster and Trauma Studies 3.*
- Peart, R. (2009). Castles in the Sand: What is Happening to the New Zealand Coast? Nelson: CraigPotton Publishing.
- Rouse, H. L., Nichol, S. L., & Goff, J. R. (2003). Introduction to the New Zealand coast. In J. R. Goff, S. L. Nichol & H. L. Rouse (Eds.), *The New Zealand Coast: Te Tai O Aotearoa* (pp. 9-24). Palmerston North: Dunmore Press, Whitireia Publishing and Daphne Brasell Associates Ltd.





#### www.gns.cri.nz

# Principal Location

1 Fairway Drive Avalon PO Box 30368 Lower Hutt New Zealand T +64-4-570 1444 F +64-4-570 4600

# Other Locations

Dunedin Research Centre
764 Cumberland Street
Private Bag 1930
Dunedin
New Zealand
T +64-3-477 4050
F +64-3-477 5232

Wairakei Research Centre 114 Karetoto Road Wairakei Private Bag 2000, Taupo New Zealand T +64-7-374 8211

F +64-7-374 8199

National Isotope Centre 30 Gracefield Road PO Box 31312 Lower Hutt New Zealand T +64-4-570 1444 F +64-4-570 4657