Table of Contents

1.	INT	INTRODUCTION				
	1.1	Why another report on marine issues?	1			
	1.2	The role and strategic approach of the Parliamentary Commissioner for the Environment	4			
	1.3	Terms of reference	4			
	1.4	Approach and methodology	5			
	1.5	The structure of the report	7			
2.	INFLUENCE OF VALUES AND EXPECTATIONS OF THE MARINE ENVIRONMENT					
	2.1	Introduction	8			
	2.2	Marine ecosystem functions	8			
	2.3	Marine ecosystem goods	10			
	2.4	Tangata whenua	14			
	2.5	Recreation	17			
	2.6	Tourism	18			
	2.7	Upstream users	19			
	2.8	Researching the marine world	20			
	2.9	Public interest and conservation	21			
3.	AGENCIES AND SYSTEMS FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT					
	3.1	Introduction	25			
	3.2	The implications of international obligations				
	3.3	The role of Government 28				
	3.4	Fisheries management	29			
		3.4.1 Commercial fishing				
		3.4.2 Maori customary fisheries				
		3.4.3 Recreational fishing				
	3.5	Environmental management	36			
		3.5.1 Exclusive occupation of the coastal marine area				
		3.5.2 Non-exclusive occupation of coastal space				
		3.5.3 Exclusion of marine areas for conservation and research purposes				
		3.5.4 Pollution of the marine environment				
	3.6	Non-Government groups	39			
	3.7	Government initiatives and strategies	41			
	3.8	Issues affecting development of systems to manage the marine environment	44			
		3.8.1 The dominance of fishing				
		3.8.2 Compartmentalisation				

		3.8.5 Local and national			
		3.8.6 Accountability			
		3.8.7 Monitoring and compliance			
		3.8.8 Fisheries monitoring			
		3.8.9 Compliance			
		3.8.10 Participation and communication			
	DIGI	TEG AND DEGDONGIBLY VEYEG			
4.	RIGHTS AND RESPONSIBILITIES				
	4.1	Introduction 4.1.1. The content of intention	60		
		4.1.1 The nature of rights			
		4.1.2 Issuing rights within a commons			
	4.0	4.1.3 Rights and sustainability	60		
	4.2	Fishing rights	62		
		4.2.1 Commercial			
	4.2	4.2.2 Recreational	"		
	4.3	Treaty of Waitangi	66		
		4.3.1 The principles of the Treaty			
		4.3.2 Nga Wero: Challenges	70		
	4.4	Implications of rights for marine environmental management	70		
	4.5	Other kinds of rights	71		
5.	ADEQUACY OF ENVIRONMENTAL INFORMATION				
	5.1	Introduction	74		
	5.2	Different kinds of information	74		
		5.2.1 Formal information			
		5.2.2 Informal information			
		5.2.3 Matauranga Maori			
	5.3	What is known about the marine environment?	75		
	5.4	Who invests in information?	78		
		5.4.1 Government agencies			
		5.4.2 Other stakeholders			
	5.5	Issues for effective use of information	82		
	5.6	Application to management			
	5.7	Public awareness and education	86		

3.8.3 Nga Whakahaere Ara Ake: Tangata whenua concerns

3.8.4 Management and independence

	FUTURE VISION		91	
6.	CONCLUSIONS AND RECOMMENDATION			
	6.1 Conclu	usions	96	
	6.2 Where	e to, from here?	98	
	6.3 Recon	nmendations	98	
BIB	LIOGRAPHY		101	
GL	GLOSSARY			
APl	PENDICES			
1	Organisations	s and individuals consulted in the preparation of this report.	104	
2	The Treaty of	f Waitangi Fisheries Commission: Te Ohu Kaimoana	106	
3	New Zealand	's marine reserves and marine protected areas	107	
4	Statutory fran	nework for marine environmental management	108	
5	Agencies resp	ponsible for managing the marine environment	109	
6	International	agreements relating to the marine environment	110	
7	Government	initiatives and strategies	111	

VISTAS

The themes of this report are illustrated by case studies, stories gained through consultation, or examples of alternative approaches to various marine environmental management issues. They are referred to in the text as vistas.

1	Examples of marine environmental management studies	1
2	An oceans approach by other nations	2
3	What is meant by the marine environment	5
4	Uses and values of the marine environment	11
5	Whale Watch Kaikoura	19
6	What does upstream pollution cost?	20
7	Marine reserves and other marine protected areas	21
8	Bird and marine mammal bycatch	23
9	Southern Bluefin tuna in crisis	28
10	Ngati Wai and the Poor Knights marine reserve	32
11	Maketu – the establishment of a taiapure	33
12	Piwhane – Spirits Bay: a unique ecosystem	34
13	Choosing a model for managing the recreational fishing sector	35
14	Risk to New Zealand – marine biosecurity	39
15	Proposed Hauraki Gulf Marine Park	43
16	Natural marine boundaries	46
17	Compliance and communities	53
18	Community-based approaches to management	54
19	Chaos at sea – the application of chaos theory to fisheries management	55
20	Bycatch and discards	63
21	The Bluff oyster story – where did we go wrong?	64
22	The Treaty in legislation for the marine environment	68
23	New opportunities – bioprospecting	69
24	Invertebrate bycatch	72
25	What is the status of our fish stocks?	76
26	The shelves of ghosts – classifying the unknown	78
27	New Zealand's contribution to marine science	79
28	The rock lobster industry	81
29	Progress since the 1990 PCE/COAG report	81
30	Management of orange roughy - ineffective use of information	84
31	Schools' initiatives: a sample	88