

Regional Marine Plans: Fisheries Management Challenges Under *Australia's Oceans Policy*

by

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DECLARATION

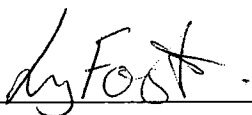
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Foster, E. (unpublished). "Evaluation of Alternative Models." Consultancy report for the National Oceans Office, 2003.

Foster, E.G. and Haward, M. (2003). "Integrated Management Councils. A Conceptual Model for Ocean Policy Conflict Management in Australia." *Ocean & Coastal Management*, 46: 547-563.

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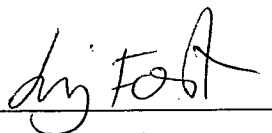
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ABSTRACT

The release of the Commonwealth's *Australia's Oceans Policy* (AOP) in 1998, introduced the concept of integrated ecosystem-based oceans management to be implemented through Regional Marine Plans. The South-east Regional Marine Plan (SERMP) was the first plan developed under AOP. Fisheries, being the third largest industry in the south-east region, play a significant role in the implementation of the SERMP. This thesis identifies implementation issues for Australian fisheries in the broader context of regional marine planning. Specifically, fisheries and oceans management arrangements are analysed for their capacities to meet the objectives of AOP, in terms of integration and conflict management that crosses jurisdictions and sectors, and also within the fisheries sector.

This thesis argues that effective implementation of the SERMP will require an advanced capacity for integration between sectors and jurisdictions. It also argues that the implementation of the SERMP will require more innovative and focused approaches to conflict management, so that traditionally opposing interest groups can work towards cohesive integrated oceans management. This thesis examines the development and implementation of the SERMP, supported by comparative analysis of international initiatives and other approaches to natural resource management. This analysis demonstrates that fisheries require a carefully planned combination of instrumental and institutional arrangements to address issues raised in the SERMP. Likewise, oceans management currently addresses integration issues at the higher echelons of government but lacks the operational support to effectively implement the SERMP. This thesis proposes the use of key tools that incorporate instrumental and institutional bases for integrated management that embody ecosystem-based management principles and effective conflict management techniques.

Australia has traditionally adopted a "negative" integration approach to natural resource management, whereby activities should *not be inconsistent* with overall objectives for management. This thesis concludes that Australia needs to progress towards a more "positive" approach to integration in oceans management by breaking through traditional sectoral and jurisdictional mindsets in order to practically meet ecosystem-based objectives. This requires a more concentrated effort to build the integrative capacity from within sectors, such as fisheries, to meet the overall objectives of AOP.

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**So long and thanks
for all the fish!**

Douglas Adams

TABLE OF CONTENTS

<i>Title</i>	i
<i>Declaration</i>	ii
<i>Authority of Access</i>	iii
<i>Abstract</i>	iv
<i>Acknowledgements</i>	v
<i>Table of Contents</i>	vii
<i>List of Tables, Figures and Boxes</i>	xii
<i>Acronyms</i>	xiii
 PART I	
INTRODUCTION	xvii
<i>Aims, objectives and significance</i>	xviii
<i>Research design and method</i>	xix
<i>Scope and limitations</i>	xxi
<i>Thesis structure</i>	xxiii
 Chapter 1	
Framework of Analysis	1
1.1 Integrated management in the international arena.....	1
1.2 Integrated management of Australia's oceans.....	4
1.2.1 The meaning of integration and the Policy Integration Scale.....	5
1.2.2 Hierarchies, markets and networks for integration.....	8
1.2.3 Structures to achieve integration.....	10
1.2.3.1 Cross-jurisdictional integration.....	12
1.2.3.2 Cross-sectoral integration.....	13
1.2.3.3 Intra-sectoral integration.....	14
1.2.4 Processes to achieve integration.....	15
1.2.5 Integration in the context of Australia's fisheries and oceans.....	17
1.2.5.1 Cross-jurisdictional integration of Australia's oceans management.....	17
1.2.5.2 Cross-sectoral integration of Australia's oceans management.....	18
1.2.5.3 Cross-jurisdictional integration of Australia's fisheries management.....	18
1.2.5.4 Cross-sectoral integration of Australia's fisheries management.....	18
1.2.5.5 Intra-sectoral integration of Australia's fisheries management.....	18
1.3 Conflict management.....	19
1.3.1 What is conflict?.....	19
1.3.2 What is conflict management?.....	21
1.3.3 Conflict management tools.....	22
1.3.3.1 Preventative conflict management.....	24
1.3.3.2 Negotiation.....	25
1.3.3.3 Mediation.....	26
1.3.3.4 Conciliation.....	28
1.3.3.5 Arbitration.....	28
1.3.3.6 Litigation.....	28
1.3.3.7 Enforcement.....	29
1.3.3.8 Public Consultation.....	29
1.3.3.8.1 Co-management.....	30
1.3.3.8.2 Stakeholder Theory.....	32
1.4 Framework of Analysis.....	34
 PART II	
AUSTRALIA'S OCEANS & FISHERIES DEVELOPMENTS	
 Chapter 2	
<i>Australia's Oceans Policy and regional marine planning</i>	35
2.1 The introduction of integrated oceans management into Australia.....	35
2.2 The development of <i>Australia's Oceans Policy</i>	37
2.2.1 Australia's integrated oceans management institutional arrangements.....	40
2.2.2 <i>Australia's Oceans Policy</i> commitment for fisheries.....	42

2.3 Regional Marine Plans	45
2.3.1 The South-east Regional Marine Plan	47
2.3.2 The SERMP commitment for fisheries	52
2.3.3 Marine Protected Areas	55
2.3.3.1 Commonwealth MPAs in the SERMP area	57
2.4 Integration in Commonwealth oceans management	
2.4.1 Cross-sectoral arrangements in oceans management	59
2.4.2 Cross-jurisdictional arrangements in oceans management	61
2.4.3 Intra-sectoral arrangements in oceans management with respect to fisheries	64
2.5 Conflict management in the Commonwealth Oceans Policy process	65
2.5.1 Commonwealth-state relations	66
2.5.2 Conflict management in the Commonwealth Marine Protected Areas process	67
2.5.3 The National Oceans Office	70
2.5.4 Other oceans management bodies and the SERMP	71
2.6 Summary	73
Chapter 3 Fisheries management	74
3.1 Global fisheries management developments	74
3.1.1 Regional Fisheries Management Organisations	76
3.1.1.1 Do RFMOs adequately address the issue of integration as raised in the RMP process?	78
3.2 Australian fisheries management	79
3.2.1 Direct fisheries management arrangements	81
3.2.1.1 The Australian Fisheries Management Authority	81
3.2.1.1.1 Does the AFMA provide adequate capacity to address the issue of integration as raised in the RMP process?	83
3.2.1.2 Management Advisory Committees	84
3.2.1.2.1 Do MACs provide adequate capacity to address the issue of integration as raised in the RMP process?	86
3.2.1.3 The AFMA's plans of management	87
3.2.1.3.1 Do the AFMA's plans of management adequately address the issue of integration as raised in the RMP process?	87
3.2.1.4 The Southern and Eastern Scalefish and Shark Fishery	88
3.2.1.4.1 Does the SESSF adequately address the issue of integration as raised in the SERMP?	90
3.2.1.5 Commonwealth Fisheries Bycatch Policy	91
3.2.1.5.1 Bycatch Action Plans	92
3.2.1.5.2 Do BAPs adequately address the issue of integration as raised in the RMP process?	93
3.2.1.6 Commonwealth Fisheries Policy Review	94
3.2.1.6.1 Does the CFPR adequately address the issue of integration as raised in the RMP process?	96
3.2.2 Indirect fisheries management arrangements	99
3.2.2.1 EPBC Act – fisheries management requirements	100
3.2.2.1.1 Strategic assessments	101
3.2.2.1.2 Do strategic assessments adequately address the issue of integration as raised in the RMP process?	102
3.2.2.2 ESD reporting – The 'How To' Guide for Wild Capture Fisheries	103
3.2.2.2.1 Steps in ESD reporting	104
3.2.2.2.2 Limitations of ESD reporting	105
3.2.2.2.3 Does the ESD framework adequately address the issue of integration as raised in the RMP process?	106
3.3 What are the conflicts specific to Australian fisheries resulting from integration issues?	107
3.3.1 Type I – Jurisdictional conflicts	107
3.3.2 Type II – Management mechanisms	108
3.3.3 Type III – Internal allocation issues	110
3.3.4 Type IV – External allocation issues	111
3.3.5 Type V – Philosophical issues	113
3.4 Summary	114

PART III COMPARATIVE ANALYSIS

Chapter 4	International integrated policy developments	115
4.1	Canada	
4.1.1	Canada's oceans management	116
4.1.2	Canada's fisheries management	120
4.1.2.1	Canada's Atlantic coast fisheries	123
4.1.2.2	Canada's Pacific coast fisheries	126
4.1.3	Lessons for Australia	127
4.2	United States of America	
4.2.1	USA's oceans management	129
4.2.2	USA's fisheries management	135
4.2.2.1	Regional Fisheries Management Councils	136
4.2.3	Lessons for Australia	138
4.3	New Zealand	
4.3.1	New Zealand's oceans management	140
4.3.2	New Zealand's fisheries management	142
4.3.3	Lessons for Australia	145
4.4	European Union	
4.4.1	The European Union's oceans management	146
4.4.2	The European Union's fisheries management	148
4.4.2.1	Regional Advisory Councils	153
4.4.3	Lessons for Australia	154
4.5	Iceland	
4.5.1	Iceland's oceans management	155
4.5.2	Iceland's fisheries management	155
4.5.3	Lessons for Australia	157
4.6	Summary	159
Chapter 5	Australian natural resource management models	160
5.1	Queensland <i>Integrated Planning Act 1997</i>	160
5.1.1	Planning Instruments	
5.1.1.1	Planning Schemes	161
5.1.1.2	Other instruments of the IPA	161
5.1.2	Review of Planning Instruments	162
5.1.3	Integrated Development Assessment System	162
5.1.4	Appeals processes	
5.1.4.1	Planning and Environment Court	163
5.1.4.2	Building and Development Tribunals	163
5.1.5	How are integration and conflict dealt with in this NRM model?	164
5.2	Great Barrier Reef Marine Park	165
5.2.1	<i>Great Barrier Reef Marine Park Act 1975</i>	166
5.2.1.1	Great Barrier Reef Marine Park Authority	166
5.2.1.2	Great Barrier Reef Consultative Committee	167
5.2.1.3	Zoning plans	168
5.2.2	Emerald Agreement 1979	170
5.2.2.1	Great Barrier Reef Ministerial Council	171
5.2.3	How are integration and conflict dealt with in this NRM model?	172
5.3	Murray-Darling Basin Agreement	173
5.3.1	Murray-Darling Basin Ministerial Council	175
5.3.2	Murray-Darling Basin Commission	176
5.3.3	Community Advisory Committee	177
5.3.4	How are integration and conflict dealt with in this NRM model?	177
5.4	Tasmanian Regional Forests Agreement	
5.4.1	<i>National Forests Policy Statement 1992</i>	178
5.4.2	Regional Forests Agreements	179
5.4.3	CAR reserve system	179
5.4.4	The Tasmanian RFA	179
5.4.5	How are integration and conflict dealt with in this NRM model?	182
5.5	Spencer Gulf Marine Plan	
5.5.1	Marine planning in South Australia	183

5.5.2 Spencer Gulf Marine Plan	184
5.5.2.1 Institutional arrangements	186
5.5.3 How are integration and conflict dealt with in this NRM model?	187
5.6 Lessons for Australia	189
5.7 Summary	191
Chapter 6 International natural resource management models	192
6.1 Commissioner for the Environment and Sustainable Development (Canada)	193
6.1.1 Commissioner for the Environment and Sustainable Development	193
6.1.2 How are integration and conflict dealt with in this NRM model?	194
6.2 West Coast of Vancouver Island Aquatic Management Board (Canada)	195
6.2.1 The Board composition	196
6.2.2 WCVIAMB Terms of Reference	196
6.2.3 How the Board functions	197
6.2.4 How are integration and conflict dealt with in this NRM model?	198
6.3 Eastern Scotian Shelf Integrated Management Initiative (Canada)	200
6.3.1 Institutional arrangements for the implementation of the ESSIM Plan	201
6.3.2 The Eastern Scotian Shelf Ocean Management Plan	202
6.3.3 How are integration and conflict dealt with in this NRM model?	204
6.4 Quatsino Sound Coastal Management Plan (Canada)	205
6.4.1 Planning Units	206
6.4.2 Determining acceptable uses	207
6.4.3 Categorising planning units in terms of management emphasis	207
6.4.4 How are integration and conflict dealt with in this NRM model?	208
6.5 <i>Resource Management Act 1991</i> (New Zealand)	209
6.5.1 Central Government - roles and responsibilities	210
6.5.2 Regional Councils - roles and responsibilities	211
6.5.3 District/City Councils - roles and responsibilities	211
6.5.4 Public participation – rights of appeal & the Environment Court	212
6.5.5 Resource consents	213
6.5.6 Coastal areas	214
6.5.7 How are integration and conflict dealt with in this NRM model?	215
6.6 Lessons for Australia	217
6.7 Summary	219

PART IV RESULTS AND CONCLUSIONS

Chapter 7 The Toolbox	220
7.1 Approaches for integration and conflict management	220
7.1.1 A Marine Policy and Legislative Clearing House	221
7.1.2 An Ecologically Sustainable Development Auditor	222
7.1.3 Mediation training	222
7.2 Integrated oceans management tools	223
7.2.1 A National Integrated Oceans Management Policy	225
7.2.2 Conservation Zoning	226
7.2.3 An Integrated Oceans Management Act	227
7.2.4 The future for Marine Protected Areas	228
7.3 Fisheries management tools	230
7.3.1 Regional OCS arrangements	231
7.3.2 Fisheries management plans	231
7.3.2.1 An overarching management plan	233
7.3.3 Full Ecologically Sustainable Development reporting for Australian fisheries	235
7.3.4 Management Strategy Evaluation	236
7.3.5 Fisheries Observer Policy	238
7.3.6 Conflict Management Toolbox	239
7.4 Institutional tools	240
7.4.1 An Integrated Oceans Management Inquiry by the Resource Assessment Commission	241
7.4.2 Ongoing role for the National Oceans Office	242
7.4.2.1 Clearing House for Oceans Policy and Legislation	242

7.4.2.2 Independent Assessment Board for Planning Approvals under a tenure allocation regime.....	242
7.4.2.3 Monitoring of RMP implementation – regional offices.....	243
7.4.2.4 Secretariat to the relevant Ministerial Council.....	244
7.4.2.5 Mediator for regional multiple-use management.....	244
7.4.3 An Integrated Oceans Management Ministerial Council.....	245
7.4.4 Department of the Oceans.....	248
7.4.5 Integrated Oceans Management Advisory Councils.....	249
7.4.6 Regional Fisheries Advisory Councils and the National Fisheries Allocation Board.....	252
7.4.7 Regional Fisheries Management Forums.....	255
7.4.8 Fisheries Interdepartmental Committee.....	256
7.4.9 Fishing Industry Policy Council.....	256
7.4.10 Fisheries Management Advisory Committee Reform.....	257
7.5 Summary.....	259

Chapter 8 Conclusion

8.1 Introduction.....	260
8.2 Integration in Australia's oceans management.....	260
8.3 Australia's fisheries management.....	261
8.4 International experience and other natural resource management models.....	261
8.5 The Toolbox.....	262
8.6 Conclusions.....	264

Bibliography	265
<i>Web References</i>	285
<i>Personal Communication</i>	292
<i>Speeches</i>	293
<i>Legislation</i>	293
<i>International Legislation</i>	293

Appendix 1 Permission forms	294
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LIST OF TABLES, FIGURES AND BOXES

Table 1	
Policy Integration Scale.....	6
 Figure 1	
Commonwealth Integrated Oceans Management institutional arrangements.....	41
 Figure 2	
Map of LMEs that will be the basis for regional marine planning in Australia.....	48
 Figure 3	
Australian fisheries management institutional arrangements.....	84
 Figure 4	
Map illustrating the amalgamated GBR area as included in the Great Barrier Reef Marine Park Zoning Plan 2003.....	169
 Figure 5	
Map illustrating the final Zoning Plan for the amalgamated GBR under the Representative Areas Program in accordance with the conservation zones and associated allowable activities.....	170
 Figure 6	
Map illustrating the interdependence of states based on the complex and far reaching River Murray system.....	174
 Box 1	
Role of the Murray-Darling Basin Ministerial Council.....	176
 Figure 7	
Spencer Gulf Marine Planning Area and Spencer Gulf Biounits.....	184
 Figure 8	
Proposed ESSIM Forum to aid the development and effective implementation of the ESSIM Plan.....	202
 Figure 9	
One proposal for the institutional structure of the South-East Region's Integrated Oceans Management regime.....	247
 Figure 10	
One proposal for the institutional structure of the South East Region's fisheries.....	254

ACRONYMS

AAT	Administrative Appeals Tribunal
ABARE	Australian Bureau of Agricultural and Resource Economics
ACE	Annual Catch Entitlement (NZ)
ADR	Alternative Dispute Resolution
AFC	Australian Fisheries Council
AFFA	Agriculture, Fisheries & Forestry – Australia (now DAFF)
AFMA	Australian Fisheries Management Authority
AFMF	Australian Fisheries Management Forum
AFPR	Atlantic Fisheries Policy Review (Canada)
AFS	Australian Fisheries Service
AFZ	Australian Fishing Zone
ALGA	Australian Local Government Association
AMS	Alternative Management Strategies [Project]
ANZECC	Australian and New Zealand Environment and Conservation Council
AOP	Australia's Oceans Policy
APEC	Asia-Pacific Economic Cooperation
BAOI	Broad Area of Interest
BAOO	Board Agency of Operational Officers
BAP	Bycatch Action Plan
BASO	Board Agency of Senior Officials
BATNA	Best Alternative to a Negotiated Agreement
BRS	Bureau of Rural Sciences
CAC	Community Advisory Committee (Murray-Darling Basin Initiative)
CAR	Comprehensive, Adequate and Representative
CBD	Convention on Biological Diversity
CC	Consultancy Committee
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCFAM	Canadian Council of Fisheries and Aquaculture Ministers
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CESD	Commissioner of the Environment and Sustainable Development (Canada)
CFP	Common Fisheries Policy (EU)
CFPR	Commonwealth Fisheries Policy Review
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMA	Coastal Management Area (Canada)
COA	Canada's Oceans Act
COAG	Council of Australian Governments
COMSER	Commission on Marine Sciences, Engineering and Resources (USA)
COP	Convention of the Parties (CBD)
COS	Canada's Oceans Strategy
CPFB	Commonwealth Policy on Fisheries Bycatch
CVIT	Commonwealth Victorian Inshore Trawl
CZM	Coastal Zone Management
DAFF	Department of Agriculture, Fisheries and Forestry
DEH	Department of Environment and Heritage
DEO	Desired Environmental Outcomes (Queensland IPA)
DEST	Department of Education, Science and Training
DFO	Department of Fisheries and Oceans (now Fisheries and Oceans Canada)
DITR	Department of Industry, Tourism and Resources
DOO	Department of the Oceans
DOTARS	Department of Transport and Regional Services
DPIE	Department of Primary Industries and Energy

DPIWE	Department of Primary Industries, Water and Environment (Tasmania)
DPM&C	Department of the Prime Minister and Cabinet
DWLBC	Department of Water, Land and Biodiversity (SA)
EAP	Environment Action Plan (EU)
EC	Executive Committee
ECDWZ	East Coast Deepwater Zone
EEZ	Exclusive Economic Zone
EPBC Act	Environment Protection and Biodiversity Conservation Act
ER	Ecologically Rated [Zones]
ESD	Ecologically Sustainable Development
ESFM	Ecologically Sustainable Forest Management
ESS	Eastern Scotian Shelf (Canada)
ESSIM	Eastern Scotian Shelf Integrated Management (Canada)
ESSOMP	Eastern Scotian Shelf Ocean Management Plan (Canada)
EU	European Union
FAB	Fisheries and Aquaculture Branch
FAG	Fisheries Assessment Group
FAO	Food and Agriculture Organisation
FCMA	Fishery Conservation and Management Act (USA)
FIDC	Fisheries Interdepartmental Committee
FIFG	Financial Instrument for Fisheries Guidance (EU)
FIPC	Fishing Industry Policy Council
FMA	Fisheries Management Act 1991
FMP	Fisheries Management Paper
FPB	Forest Practices Board (Tasmania)
FRDC	Fisheries Research and Development Corporation
GA	General Assembly
GABTF	Great Australian Bight Trawl Fishery
GBR	Great Barrier Reef
GBRCC	Great Barrier Reef Consultative Committee
GBRMC	Great Barrier Reef Ministerial Council
GBRMP	Great Barrier Reef Marine Park
GBRMPA	Great Barrier Reef Marine Park Authority
GHATF	Gillnet, Hook and Trap Fishery
GIS	Geographical Information Systems (SA)
IDAS	Integrated Development Assessment System (Queensland IPA)
IDC	Interdepartmental Committee
IFMP	Integrated Fisheries Management Plan (Canada)
IGAE	Inter-Governmental Agreement on the Environment
IMCAM	Integrated Marine and Coastal Area Management
IIMCR	Institute for International Mediation and Conflict Resolution
IMP	Integrated Management Plan (Canada)
IOM	Integrated Oceans Management
IOMAC	Integrated Oceans Management Advisory Committee
IOMMC	Integrated Oceans Management Ministerial Council
IOMWG	Integrated Oceans Management Working Group
IPA	Integrated Planning Act 1997 (Queensland)
IPOA	International Plan of Action
ITLOS	International Tribunal for the Law of the Sea
ITQ	Individual Transferable Quota
IUU	Illegal, Unreported and Unregulated [fishing]
JANIS	Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-Committee
JPA	Joint Project Agreement (Canada)
LME	Large Marine Ecosystem
LOMA	Large Ocean Management Area (Canada)
LOSC	Law of the Sea Convention

LWBC	Land and Water British Columbia Incorporated (Canada)
MAC	Management Advisory Committee
MACC	Marine and Coastal Committee
MACO	Minister's Advisory Council on Oceans (Canada)
MACOP	Ministerial Advisory Committee on Oceans Policy (NZ)
MAGP	Multi-annual Guidance Program (EU)
MAGOP	Ministerial Advisory Group on Oceans Policy
MC	Management Committee (Canada)
MCCN	Marine and Coastal Community Network
MCFFA	Ministerial Council on Forestry, Fisheries and Aquaculture
MDB	Murray-Darling Basin
MDBC	Murray-Darling Basin Commission
MDBMC	Murray-Darling Basin Ministerial Council
MEQ	Marine Environmental Quality (Canada)
MFCMA	Magnuson Fishery Conservation and Management Act (USA)
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MSE	Management Strategy Evaluation
MSY	Maximum Sustainable Yield
NADRAC	National Alternative Dispute Resolution Advisory Council
NAFO	Northwest Atlantic Fisheries Organisation (Canada)
NES	National Environment Strategy (Iceland)
NFAB	National Fisheries Allocation Board
NFPS	National Forests Policy Statement
NGO	Non-government Organisation
NMFS	National Marine Fisheries Service (USA)
NOAA	National Oceanic & Atmospheric Administration (USA)
NOAG	National Oceans Advisory Group
NOC	National Ocean Council (USA)
NOMB	National Oceans Ministerial Board
NOO	National Oceans Office
NPWS	National Parks and Wildlife Services (Queensland)
NRM	Natural Resource Management
NRMMC	Natural Resource Management Ministerial Council
NRSMPA	National Representative System of Marine Protected Areas
NSG	National Standard Guidelines (USA)
NWSJEMS	North West Shelf Joint Environmental Management Study
NZCPS	New Zealand Coastal Policy Statement
OAG	Office of the Auditor General (Canada)
OBOM	Oceans Board of Management
OCMD	Oceans and Coastal Management Division (Canada)
OCS	Offshore Constitutional Settlement
OMPG	Oceans Management and Planning Group (Canada)
OMS	Oceans Management Strategy (Canada)
OPIDC	Oceans Policy Inter-Departmental Committee
OPSAG	Oceans Policy Science Advisory Group
PAR	Plan Amendment Report (SA)
PEC	Planning and Environment Court (Queensland IPA)
PIMC	Primary Industries Ministerial Council
PIP	Priority Infrastructure Plan (Queensland IPA)
PIS	Policy Integration Scale
PIRSA	Department for Environment and Heritage, Primary Industries and Resources (SA)
QEM	Quota Exchange Market (EU)
QMS	Quota Management System (NZ)
RAC	Regional Advisory Council (EU)
RAC	Resource Assessment Commission

RAP	Representative Areas Program (GBRMP)
RCA	Restricted Coastal Activities (NZ)
RCOM	Regional Committee on Ocean Management (Canada)
RFAC	Regional Fishery Advisory Council
RMA	Resource Management Act (NZ)
RFA	Regional Forest Agreement
RFAC	Regional Fisheries Advisory Council
RFMC	Regional Fisheries Management Council (USA)
RFMO	Regional Fisheries Management Organisations
RFO	Regional Fisheries Organisation
RMA	Resource Management Act 1991 (NZ)
RMP	Regional Marine Plan
RPAC	Regional Planning Advisory Committee (Queensland IPA)
RSMWG	Resource Sharing and Management Working Group
SAFAC	Southern Aquaculture Fisheries Advisory Committee
SBT	Southern Bluefin Tuna
SCUBA	Self Contained Underwater Breathing Apparatus
SD	Sustainable Development
SDS	Sustainable Development Strategies (Canada)
SEC	Sustainable Environment Committee
SENTF	South East Non-Trawl Fishery
SERMP	South-East Regional Marine Plan
SESSF	Southern and Eastern Scalefish and Shark Fishery
SESSFAG	Southern and Eastern Scalefish and Shark Fisheries Assessment Group
SETF	South-east Trawl Fishery
SFA	Sustainable Fisheries Act (USA)
SFMF	Southern Fisheries Management Forum
SFR	Statutory Fishing Right
SIFAC	Southern Indigenous Fisheries Advisory Committee
SoCFAC	Southern Commercial Fisheries Advisory Committee
SPP	State Planning Policy (Queensland IPA)
SRFAC	Southern Regional Fisheries Advisory Council
SReFAC	Southern Recreational Fisheries Advisory Committee
SSF	Southern Shark Fishery
TAC	Total Allowable Catch
TACC	Commercial Total Allowable Catch (NZ)
TACN	Non-Commercial Total Allowable Catch (NZ)
TAFE	Total Allowable Fishing Effort
ToR	Terms of Reference
TRFA	Tasmanian Regional Forest Agreement
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
VMS	Vessel Monitoring System
WATNA	Worst Alternative to a Negotiated Agreement
WCED	World Commission on Environment and Development
WCVI	West Coast of Vancouver Island (Canada)
WCVIAM	West Coast of Vancouver Island Aquatic Management (Canada)
WCVIAMB	West Coast of Vancouver Island Aquatic Management Board (Canada)
WTO	World Trade Organisation
YOTO	Year of the Oceans (USA)

PART I: INTRODUCTION

The Commonwealth Government released *Australia's Oceans Policy* in December 1998.¹

This document introduced the concept of integrated ecosystem-based management of Australia's vast ocean domain. The *Oceans Policy* is an ambitious and challenging approach to oceans management, which confronts long-standing resource use conflicts through a focus on integration across sectors and jurisdictions. Regional Marine Plans are designed to implement the integrated policy framework of *Australia's Oceans Policy*. The South-east Regional Marine Plan (SERMP) was the first plan to be developed under this framework and was released in May 2004.² The South-east marine region comprises offshore waters (3nm to 200nm) from just South of Bermagui in New South Wales to Cape Jervis in South Australia, taking in the waters of Victoria and Tasmania, including Macquarie Island.³

The implementation of the SERMP will impact on the fishing industry in the South-east Region, through a focused approach to integrating uses and cumulative impact management. Australia has responsibility for the fourth largest fishing zone in the world. The Australian exclusive economic zone (EEZ) is some 16 million square kilometres, an area twice the size of the continental landmass, extending from tropical to Antarctic waters.⁴ Australian fisheries have experienced a period of impressive growth over the recent past. Seafood exports have doubled in the past five years, while aquaculture has grown in value from \$237 million in 1990 to \$743 million in 2002-03 (\$135 million in the South-east Region⁵).⁶ The gross value of seafood production in 2002-03 reached \$2.2 billion (\$396 million in the South-east Region) and is expected to reach \$5 billion by 2020.⁷ Moreover, fishing, aquaculture and associated processing are vital rural industries, sustaining regional communities around the coastline.

¹ Commonwealth of Australia. (1998). "Australia's Oceans Policy." Canberra: Environment Australia.

² National Oceans Office. (2004). "South-east Regional Marine Plan – Implementing Australia's Oceans Policy in the South-east Marine Region." Hobart: National Oceans Office.

³ Ibid.

⁴ Commonwealth of Australia (1998).

⁵ National Oceans Office (2004): 8.

⁶ ABARE. (2004). "Aquaculture."

<http://www.abare.gov.au/research/fisheries/aquaculture/aquaculture.html> [Access date: 25 June 2004].

⁷ AMISC (Australian Marine Industries and Science Council). (1997). "Marine Industry Development Strategy." Canberra: DIST;

Commonwealth of Australia. (2003). "Australian Agriculture, Fisheries and Forestry at a Glance 2003." Canberra: Department of Agriculture, Fisheries & Forestry; and National Oceans Office (2004): 6.

Fisheries and other marine industries are managed under sophisticated arrangements that deal with jurisdictional issues between governments, but little attention has been given to emergent imperatives, such as decision-making across sectors including fisheries, petroleum and conservation. Existing sectoral regimes for managing ocean resources are retained under *Australia's Oceans Policy*, but the basis of management must now shift to large marine ecosystems. Once implemented, Regional Marine Plans should ensure the continued sustainability of fishing and the ecosystems on which this, and other important activities, depend.

Aims, objectives and significance

The SERMP introduces a shift in decision-making to an ecosystem-based approach, whereby decisions must be integrated across sectors (such as fisheries, petroleum, conservation and tourism) and jurisdictions (including the Commonwealth, states and territories).

Implementation of this plan is therefore likely to have a major influence on the management of marine resources, such as fisheries. The primary research question is: Does Australian fisheries management have the capacity for integration to efficiently meet the objectives of the SERMP? This thesis aims to examine both theoretical and practical issues arising from the development of the *Oceans Policy*, in particular by identifying critical issues in the implementation of fisheries management within Regional Marine Plans under *Australia's Oceans Policy* and by identifying tools and approaches for conflict management in the implementation process.

These aims are addressed through the development of a set of key objectives, which are: to evaluate alternative policy instruments and develop an implementation strategy for fisheries management within Regional Marine Plans; and to produce a framework (tools and approaches) for resolving, or at least managing, conflicts between fisheries management and other sectoral uses.

This thesis argues that effective implementation of integrated oceans management in general, and fisheries in particular, will require an enhanced capacity for integration between sectors and jurisdictions. It also argues that effective integrated management is predicated upon the development and implementation of innovative and focused approaches to conflict management.

This research is significant for several reasons. Firstly, the development of Regional Marine Plans is a world first approach to integrate sectoral and jurisdictional interests in oceans management at such a large scale and little research into this topic has been carried out from a public policy perspective. In addition, marine industries such as fisheries have not yet

faced the challenge of meeting integrated management objectives under the regional marine planning process, which includes previously unfamiliar social and economic values. This thesis is the first study that examines the integration challenges faced by fisheries in Australia in the regional marine planning process. Secondly, although conflict management has been studied in fisheries and other sectoral arrangements, few studies have focused on conflict management techniques for integrating sectoral and jurisdictional interests in integrated oceans management regimes. This thesis identifies the primary conflicts that are impeding effective integration processes in the context of integrated oceans management and fisheries management in Australia.

Research design and method

The research undertaken included an extensive review of the literature, such as academic reviews and journal articles, government reports, non-government analyses and several unpublished reports. Literature was sought in relation to fisheries implementation issues in integrated oceans management regimes and analysed to determine the framework of analysis (the Framework) for the thesis (see Chapter One). The Framework provides the focus of analysis and has been used to test for and assess the capacity for integration, through application of the Policy Integration Scale (see Section 1.2.1: Table 1), and conflict management within the given case studies. The Framework was refined in subsequent phases of the project with the collection of insights from other research resources and experiences, which brought about enhanced understanding of the pertinent issues.

Participation in the 2003 International Student Symposium on Negotiation and Conflict Resolution in the Hague, the Netherlands, provided extensive information on different conflict management techniques at both the international and national scales and an opportunity to develop some practical alternative dispute resolution skills that would benefit this project's development. The month-long Symposium, hosted by the Institute for International Mediation and Conflict Resolution (IIMCR), offered insights into the motivations and triggers of conflicts as they relate to resource management and some practical alternatives to traditional arbitration for the management of these conflicts. This was particularly appropriate for this research, which looked at the inter-relations between parties involved in resource sharing arrangements within fisheries and between resource sectors in regional marine planning.

To assess the implementation issues identified in Chapter One, a scanning exercise was conducted of literature and government reports on fisheries management, within the context of oceans management developments, in Australia, Canada, the USA, New Zealand, the European Union and Iceland. International examples are used as counterfactuals, or

hypotheses for what could have been done, for Australian development throughout the project. Although the inherent differences in politics, governance and contextual circumstances are noted as impediments to direct comparative analyses, it is recognised that certain specific aspects of these examples and some of the implementation issues they have overcome will lead to valuable and practical insights into the improvement of integration in Australia's fisheries and oceans processes.

The second phase of the research program involved specific evaluation of various approaches to integrated natural resource management. This analysis draws on experiences of overseas natural resource management sectors and other natural resource sectors within Australia. The research in this phase was based upon document analyses, literature reviews, and semi-structured interviews, focused specifically on identifying and evaluating mechanisms designed to incorporate integrative processes and to resolve or manage conflicts between contending uses in accordance with the framework of analysis described in Chapter One. This phase focused on building informal networks with pertinent stakeholders and information obtained from them was cross-referenced back to the literature where possible, to ensure information was informed and accurate. Many insights obtained from the informal networks in this phase were used to further develop the framework of analysis for how integration and conflict management can influence the implementation of policies and strategies.

The research involved in this phase was also conducted as a project for the National Oceans Office (NOO), examining implementation strategies to enhance integration and adaptive and outcomes-based management capacity. The content and analysis of the NOO report were subject to peer review by practitioners and experts in the appropriate fields. The data and their analysis have been presented in the thesis with the permission of the National Oceans Office.⁸

The third phase of the research program focused on Australia's national approach to the implementation of fisheries management in the *Oceans Policy* context. An assessment of the scope and limitations of current fisheries and oceans management arrangements, related to the goals and objectives of the regional marine planning process, was carried out. Interviews with key informants provided a range of primary data and elaborated the 'desktop studies' conducted in the previous phases. The interview schedule comprised a significant part of the research design. The face-to-face formal interviews involved a 'semi-structured open-ended questionnaire' format with 15 subjects selected on the basis of their experience and expertise with respect to their direct involvement in decision-making processes affecting the

⁸ See permission statement in Appendix One.

implementation of fisheries management in the South-east regional marine planning process. The interviews were conducted under the guidelines for research involving human subjects and following approval from the Southern Tasmania Social Sciences Human Research Ethics Committee. Letters of introduction and an accompanying information sheet were sent to subjects (via email) to request his/her participation in the investigation. Questions asked related to current fisheries and oceans management arrangements, successes and failures with respect to conflict management within these arrangements, and ways to strengthen these arrangements. A transcript was taken of the interview and was forwarded to the subject to ensure accuracy before being anonymously included in the body of the research, coded using random alphanumeric numbering (for example, "From interview with subject FR53").

The fourth phase of the research built on the preceding phases and involved the development of an inventory of policy instruments and institutional arrangements to facilitate the integration of fisheries management into regional marine planning models and outcomes and to enhance the conflict management capacity of the processes, to pre-empt any significant conflicts from arising. This 'toolbox' of policy instruments and institutional arrangements addresses the implementation of fisheries into integrated oceans management in a piecemeal approach, whereby tools can be adopted independently or in combination, but they are not necessarily presented as an all-inclusive approach to integrated management.

Scope and limitations

This research aimed to examine the implementation of fisheries management within a broad policy commitment to integrated, ecosystem-based oceans management. The focus of this research was on the development of Regional Marine Plans under *Australia's Oceans Policy*. While integrated oceans management has been promoted and supported in the international arena for a number of years, Australia is an international leader in the development of proposals for such management. This research moves beyond Australia to examine experience in other countries and to explore insights from their natural resource management. There is considerable validity in exploring international and other resource management experience to provide a basis for 'counterfactual analysis' of what could have been done under different circumstances or if different decisions were made.

The use of international comparisons provides a key limitation. Direct comparison is limited by the differences in approach between countries. It must also be emphasised that this research is limited to a 'snapshot in time', at the very early stages of the SERMP development and preceding implementation. Another limitation, which is addressed in following chapters, includes a lack of agreement over key terms or concepts.

Given the aims of the research, a toolbox of assorted instrumental and institutional arrangements to meet integration objectives while minimising conflict, is presented. Limitations of the piecemeal approach to management are recognised and are at the very essence of integrated management. It is not, however, the objective of this research to provide an overall 'fix' to the implementation issues raised in the regional marine planning process. Rather, this project draws on a range of research to offer alternative options to address issues raised by the integration of fisheries management into regional marine planning. It is recognised, however, that *ad hoc* implementation, or the inappropriate choice of tools, will not produce effective results. To meet the objectives of integrated management, the whole system needs to be taken into account.

The final limitations refer to aspects of the project design that have been incorporated, as much as possible, in the interpretation of results. The opportunities for close involvement in aspects of policy development during the course of researching and writing this thesis provided a number of benefits. At the same time it also meant that I was, at times, privy to in-house government information that was not in the 'public domain'. This information was not used until it was released publicly.

Although the research benefited greatly from the data gained in the interviews with key informants, it is recognised that there are some limitations in the use, or interpretation of this data. Care must be taken in the use of qualitative data so as not to infer perceptions of the rest of the organisation based on selective interviews. This limitation culminates from the time constraints of the project, which meant that the number of interviews was limited and therefore not all participants in the decision-making processes were included. Instead, a selected sample of the main stakeholder interests were interviewed.

Thesis structure

This thesis is divided into four major parts. Part I constitutes the Introduction, outlining the research aims and rationale of the project, the methods used to address the aims and the framework of analysis (Chapter One) on which this research is based.

Part II of the thesis provides the context of this research as it relates to Australia's current oceans management arrangements (Chapter Two) and fisheries management arrangements (Chapter Three) and addresses how these arrangements currently meet the criteria in the framework of analysis set out in Chapter One.

Part III comprises an evaluation of international fisheries and oceans policy developments (Chapter Three), and both national (Chapter Four) and international (Chapter Five) natural resource management models, in terms of the criteria in the framework of analysis set out in Chapter One.

Part IV draws on the information collected throughout the study and proposes a number of instrumental and institutional policy and management tools and approaches (Chapter Seven – The Toolbox) that could be used in Australian fisheries and oceans management to address the more specific aspects of integration and conflict management that are currently lacking. Chapter Eight presents the final conclusions and recommendations of this thesis with respect to integrated management as it stands and the future prospects for fully integrated oceans management that incorporates preventative conflict management mechanisms are discussed.

CHAPTER 1: FRAMEWORK OF ANALYSIS

The Introduction to the thesis presented the aims and scope of this study. This chapter establishes the framework of analysis on which the study is based. The distinguishing characteristics and points of analysis – forming key criteria – are extracted from the extensive literature and international experience in the field of fisheries and oceans management, as pertinent triggers for successful and efficient implementation of integrated approaches. This framework comprises the core of the study and provides the basis for comparative evaluation of international and national models addressing these criteria. Information from the analysis is used to draw conclusions and determine best practice for the implementation of Australian fisheries in the regional marine planning process.

1.1 Integrated management in the international arena

The United Nations Stockholm Declaration of 1972 called for a more integrated and coordinated approach to planning so that development would be compatible with the need to protect and improve the human environment.⁹ Years of protracted debate followed, from which the concept of integrated management arose. This concept was further refined in the prominent report by the World Commission on Environment and Development (WCED) in 1987, entitled *Our Common Future*, more commonly referred to as the *Brundtland Report*.¹⁰ In 1983 the United Nations appointed the WCED to propose strategies for sustainable development, suggesting ways to improve human well-being through development opportunities in the short-term, without threatening the local and global environment in the long-term, thus expanding on the protection of the “human environment”, as raised in the UN Stockholm Declaration.¹¹ Some of the strategies proposed in the *Brundtland Report* called for a more holistic approach to environmental management, for environment protection and sustainable development to be mandated by all, and for integration through regional and interregional action.¹²

The *Brundtland Report* triggered several international and national developments towards sustainable development. The most well known being the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The UNCED attracted

⁹ Kenchington, R. and Crawford, D. (1993). “On the Meaning of Integration in Coastal Zone Management.” *Ocean & Coastal Management*, 21: 109-127.

¹⁰ United Nations Division for Sustainable Development. (2004). “Documents: Report of the World Commission on Environment and Development (Brundtland Report, 1987).” <http://www.un.org/esa/sustdev/documents/docs.htm> [Access date: 20 June 2004].

¹¹ The Brundtland City Energy Network. (2004). “Background: The Brundtland Report.” <http://www.brundtlandnet.com/brundtlandreport.htm> [Access date: 20 June 2004].

¹² United Nations Division for Sustainable Development (2004).

policy makers, diplomats, scientists, media personnel and non-governmental organisation (NGO) representatives from 179 countries in a massive effort to reconcile the impacts from human socio-economic activities on the environment and the impact of environmental degradation on human socio-economic activities.¹³ The UNCED aimed for international agreements that respect the interests of all parties and protect the integrity of the global environment and development management systems, whilst recognising the integral and interdependent nature of the Earth.¹⁴ The UNCED recognised the need to balance social, economic and environmental needs for the future of human kind and the necessity to adopt new approaches towards this form of integrated management.

Arguably, the most significant outcome of the UNCED was the non-binding, but revolutionary Agenda 21. Agenda 21 was expected to address the pressing problems faced in light of the increasing pressure on today's society through the development of a broad programme of actions, incorporating the integration of environment and development needs. It reflects the global consensus and political commitment required for effective sustainable development¹⁵, which is the primary responsibility of national governments. Chapter 17 of Agenda 21 refers to the interconnectedness of our oceans and the need for reform in the way we manage developments in these environments, given that the oceans are an integrated whole in which resources know no boundaries. Seven key program areas are highlighted in Chapter 17, including:

- integrated management and sustainable development of coastal areas, including exclusive economic zones;
- marine environmental protection;
- sustainable use and conservation of marine living resources of the high seas;
- sustainable use and conservation of marine living resources under national jurisdiction;
- addressing critical uncertainties for the management of the marine environment and climate change;
- strengthening international, including regional¹⁶, cooperation and coordination; and
- sustainable development of small islands.

¹³ United Nations. (2002). "Johannesburg Summit 2002 - United Nations Conference on Environment and Development." http://www.johannesburgsummit.org/html/basic_info/unced.html [Access date: 3 February 2004].

¹⁴ UNEP. (1992). "Rio Declaration on Environment and Development." <http://www.unep.org/Documents/Default.asp?DocumentID=78&ArticleID=1163> [Access date: 3 February 2004].

¹⁵ The term 'sustainable development' being coined by the World Commission on Environment and Development (WCED), or the Brundtland Commission, in 1987 as meaning the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

¹⁶ "Regional" in this instance means regional on a global scale.

Program area one introduces the concept of integrated management of Coastal States' oceans in order to achieve sustainable development. However, the objectives do not specify what 'integration' actually means beyond implementing integrated policy and decision-making processes that incorporate all sectoral interest groups in a precautionary approach towards sustainable development and environmental reporting.¹⁷ To this end, the concept of 'integration' remains ambiguous in meaning and open to interpretation by the implementing State. Agenda 21, in general, is an aspirational instrument that aims to develop a fair and safe world in which all life is celebrated and as such, appeals to "enthusiasts and idealists to the extent that captures the ethos of contemporary environmentalism."¹⁸ Despite this, the enormity of the Conference and the high degree of international political will shown towards meeting the objectives of this document was revolutionary in illustrating the international shift in thinking towards 'integration', whatever its interpreted meaning.

The early 1990s also saw an increasingly alarming impact on fish stocks and ecosystem health, which resulted in increased efforts by the FAO to promote integrated management. In March 1991, at the Nineteenth Session of the FAO Committee on Fisheries, it was recommended that a new approach to fisheries management, which embraced environmental conservation and social and economic considerations, be considered as a matter of urgency.¹⁹ As a result, the FAO Code of Conduct for Responsible Fisheries (the Code of Conduct) was developed and adopted on 31 October 1995. The Code of Conduct covers six major themes, including the integration of fisheries into coastal area management.²⁰ In 1996, the FAO produced technical guidelines to assist in achieving the rational use of scarce coastal resources through integrated coastal management. These guidelines focus on the interconnectivity of fishing activities with coastal environmental health and highlight the need to integrate the protection of coastal resources with the sustainable management of their uses to achieve ecologically sustainable development.²¹

In light of common concerns relating to the conservation and sustainable use of marine and coastal biodiversity, Parties to the Convention on Biological Diversity (CBD) agreed to a work program to implement the Convention. This work program, adopted in 1995, is commonly referred to as the "Jakarta Mandate". One of the focal areas of the Jakarta Mandate is the development of implementation approaches for the integration of marine and

¹⁷ UNCED. (1992). "Earth Summit: Agenda 21." Chapter 17, s.17.5.

¹⁸ Johnston, D.M. (1996). "UNCLOS III and UNCED: A collision of mind-sets?" In: Kriwoken, L.K., Haward, M., VanderZwaag, D. and Davis, B. (eds). *Oceans Law and Policy in the Post-UNCED Era: Australian and Canadian Perspectives*. Great Britain: Kluwer Law International: 11-24.

¹⁹ Food and Agriculture Organisation. (1996). "Integration of Fisheries into Coastal Area Management." FAO Technical Guidelines for Responsible Fisheries 3.

²⁰ Food and Agriculture Organisation. (1995). "Code of Conduct for Responsible Fisheries." <http://www.fao.org/fi/agreem/codecond/ficonde.asp#BAC> [Access date: 29 April 2003]

²¹ Food and Agriculture Organisation. (1996).

coastal area management. Most recently, the Secretariat of the CBD released technical guidelines outlining some of the approaches for integration, including: the need to take an ecosystem approach to management; the importance of setting clear and measurable indicators for effective monitoring and adaptive management; the need to restore or rehabilitate key habitats to support ecosystem function and sustainable use; and the need to provide economic and social incentives for the conservation and sustainable use of biological diversity.²²

1.2 Integrated management of Australia's oceans

Integrated oceans management in Australia was seeded by international developments in the late 1980s to 1990s. Sustainable development was applied internationally to oceans and coastal areas through Chapter 17 of Agenda 21, which introduced the need for new approaches to the protection of our oceans, managing seas and oceans as an integrated whole, requiring States to develop domestic policy initiatives and to cooperate internationally and regionally for the purposes of sustainable use and environmental protection.²³ In response to these international developments, Australia developed and implemented a *National Strategy for Ecologically Sustainable Development (ESD)* in December of 1992.²⁴ The *National Strategy for ESD* provides the ecological template for cooperative decision-making and agenda setting by governments in the pursuit of ESD in Australia, based on ecosystem health and intergenerational equity.

In addition to the paradigm shift towards ESD, Australia, under the auspices of the 1994 *United Nations Law of the Sea Convention (LOSC)*, was able to officially lay claim to its vast marine territories. Given these sovereign rights over living and non-living resources within its maritime boundaries, Australia was required to demonstrate to the international community that it could effectively manage those resources; hence the added impetus for an integrated oceans management system.²⁵

²² AIDEnvironment, National Institute for Coastal and Marine Management/RIKZ, and the Coastal Zone Management Centre/the Netherlands. (2004). "Integrated Marine and Coastal Area Management (IMCAM) Approaches for Implementing the Convention on Biological Diversity." Canada: Secretariat of the Convention on Biological Diversity. CBD Technical Series No. 14.

²³ United Nations Conference on Environment and Development (UNCED). (1992). "Report of the United Nations Conference on Environment and Development." Environment Council website: Earth Summit Documents. <http://www.ecouncil.ac.cr/about/ftp/riodoc.htm> [Access date: 28 January 2004].

²⁴ Department of the Environment and Heritage. (1992). "National Strategy for Ecologically Sustainable Development." <http://www.deh.gov.au/esd/national/nsesd/strategy/> [Access date: 5 February 2004]; and Kenchington and Crawford (1993).

²⁵ Vince, J. (2003). "The Development of Australia's Oceans Policy: Institutions and the 'Oceans Policy Community'." Paper presented to the Australasian Political Studies Association Conference, Hobart, Australia. 29 September – 1 October 2003.

1.2.1 *The meaning of integration and the Policy Integration Scale*

to combine two or more things in order to become more effective²⁶

combination into an integral whole; behaviour, as of the individual, in harmony with the environment²⁷

Integration has introduced a new dimension into natural resource management whereby the system, being the ecosystems on which life depends, is interconnected and it is recognised that activities that superficially appear unrelated, can actually have a significant impact on the functioning of the system as a whole. It has therefore been imperative for a change in attitudes and approaches to traditional sectoral-based management. This new approach involves management of 'the whole'²⁸ and has been coined 'integrated management'. Integrated management attempts to overcome the deficiencies of redundancies involving multiple organisations performing the same task, policy lacunae where no organisation appears to be performing a seemingly necessary task, and the relative incoherence of contradictory goals and objectives between organisations.²⁹ Depending on the context in which it is applied, integration can involve anything from simple informative action between sectors and/or jurisdictions, to the integrated management of resources such that sectoral and jurisdictional boundaries are broken down and resources are managed on an ecosystem basis, perhaps even by integrated governance mechanisms. In between these extremes lies various options such as the simple harmonisation of sectoral-based objectives and the renegotiation of management arrangements such that they take into account and can react to sectors on which they may make an impact or are impacted by.

Thus, it can be said that integration is a continuum, ranging from simple coordination of autonomous organisations to the integrated management of different organisations under one overall strategy or policy. The sequencing of the qualitative components of integration³⁰, as they relate to government, have been developed into a *Policy Integration Scale* (see Table 1).³¹

²⁶ The Cambridge Advanced Learners Dictionary.

<http://dictionary.cambridge.org/results.asp?dict=B&searchword=integration> [Access date: 2 April 2003].

²⁷ The Macquarie Dictionary. <http://www.macquariedictionary.com.au/> [Access date: 2 April 2003].

²⁸ In this sense, 'the whole' may refer to the entire ecosystem, the sectors/jurisdictions on which management decisions may impact, the various layers of government, or any other predefined parameter.

²⁹ Peters, B.G. (1998). "Managing Horizontal Government: The Politics of Co-ordination." *Public Administration*, 76 (Summer): 295-311.

³⁰ 'Integration' and 'coordination' are used interchangeably throughout this thesis.

³¹ Considine, M. (1992). "Alternatives to hierarchy: The role and performance of lateral structures inside bureaucracy." *Australian Journal of Public Administration*. 51: 309-320; and Metcalfe, L. (1994). "International Policy Co-ordination and Public Management Reform." *International Review of Administrative Sciences*, 60: 271-290.

Table 1 Policy Integration Scale (PIS)

	Scale	Description
Maximum integration (or coordination)	9	Overall government strategy/policy, that is full matrix structure – this assumes a uniform national government with only technically convenient instruments to elaborate at the implementation level – this is practically unattainable due to the inherent conflicting interests between ministries, but is included for completeness of the Policy Integration Scale.
	8	Central government establishing government priorities/main lines of policy for all ministries/departments – this is high level preventative conflict management.
	7	Centrally controlled parameter-setting with respect to what different ministries/departments should <i>not</i> do – as such this is another “negative” integration process, which includes controls such as budget constraints or setting limits on the policy discretion of ministries.
	6	Third-party arbitration of integrative differences – another example of “negative” and reactive integration in response to parties being unable to resolve issues themselves – this is a formal conflict management response.
	5	Seeking consensus between ministries/departments i.e. use of project teams/joint committees/taskforces – this is an example of “positive” integration and is usually an informal voluntary process in recognition of the benefits of integration.
	4	Ensuring that government has one voice and different ministries/departments do not take divergent negotiating positions by clearing work through the chains of command – this is coined “negative” integration as it works on the principle of not being inconsistent rather than being proactively cohesive – this is a conflict avoidance response.
	3	Two-way consultation between ministries/departments to inform on and respond to policy formation – depending on the effectiveness of consultation in incorporating other interests, this is a lower level preventative conflict management response.
	2	One-way information exchange between ministries/departments through both formal and informal information systems and networks.
	1	Independent decision-making by autonomous ministries/departments – managerial contact only.
Minimal integration:		

Adapted from: Considine (1992); Metcalfe (1994); and Organisation for Economic Cooperation and Development, PUMA Group. (1996). “Globalisation: What Challenges and What Opportunities for Government?” Paris: OECD. Paper OCDE/GD(96)64.

The *Policy Integration Scale* (the PIS) defines the capacities for integration rather than focusing on the structures that embody them.³² The PIS is interpreted such that higher levels of policy integration depend on the strength and cohesiveness of policy integration at the lower levels.³³ Without this sound structural base of lower level policy integration, any attempts towards policy integration at the higher levels will most likely fail. The most common types of integrative bodies are the informal working groups, taskforces and project teams, otherwise referred to as lateral structures, which most frequently concern themselves with both problem-solving and operational issues.³⁴ These bodies require a generalisation that can also provide worthy insights into specific issues, hence are situated around the middle of the PIS. The success of lateral structures in achieving successful integration is highly dependent on the group leader's skills, mandate and commitment to the process and its integrated outcomes.³⁵ A leader cannot enter into negotiations with a pre-determined outcome in mind, but a pre-determined approach can aid timely resolutions.

Coordination is the basis for any integrated system and mainly refers to the more minimalist levels of the PIS. Coordination generally involves independent, equitable components working towards a common goal or vision.³⁶ In a broad sense, coordination means that the parts of a system work together more effectively and efficiently than if no coordination took place.³⁷ Integration, in its full capacity, describes more of a cooperative exchange and unified process that insinuates an all-inclusive approach to management, although often with subordinate components.³⁸ In terms of integrated oceans management, this means that all sectoral and jurisdictional factors are at least considered for their impact on the environment and how the environment will be impacted by the cumulative activities. These terms are used interchangeably throughout this thesis, but at a minimum, coordination or integration indicates some type of harmonisation of policies and practices across jurisdictional and sectoral boundaries, thus enabling the whole to work better than the sum of the parts.³⁹

³² Metcalfe (1994).

³³ Ibid.

³⁴ Considine (1992).

³⁵ Ibid.

³⁶ Kenchington and Crawford (1993).

³⁷ Metcalfe (1994).

³⁸ Kenchington and Crawford (1993).

³⁹ Metcalfe (1994).

1.2.2 Hierarchies, markets and networks for integration

Integration can be achieved through: hierarchical dominance, which represents a top-down approach to management; market forces, which assumes there is advantage in bargaining and exchange; networks of organisations or individuals; or a combination of these alternatives.⁴⁰

The hierarchical approach is the traditional approach to management of the public sector as the high volume of work and speed required for decision-making means that the constant long-term attention of a managerial team is required.⁴¹ It is based on the principle of subsidiarity or 'nested' strategies, whereby the impetus for change or integration ideally stems from a central body or organisation at the top of the hierarchical chain and is implemented down the chain through management actions and policy programs.⁴² The success of hierarchies in incorporating a capacity for integration is highly dependent on effective communication between levels in the hierarchical chain, which is in itself often shaped by selfish concerns about career mobility.⁴³ However, hierarchies have the potential to lower transaction costs by utilising authority and command within the organisation and minimising conflicts and competition between sectors.⁴⁴ The more nested the hierarchical structure and the more integration that occurs between implementation levels of government, the lower the transaction costs and the more efficient the institution in their management role.⁴⁵

To achieve efficiencies in integrated management it is assumed that the central decision-making body has sufficient information to make effective decisions that cut across sectors, regions and interest groups. In reality, this is often an unrealistic assumption that makes this hierarchical system difficult to implement. Other common problems with hierarchies have developed from the misuse of the approach. Problems include: excessive layering, which can undermine the authority between immediate levels; a lack of value-adding by managers to the work of their subordinates; and the dissociation of group decision-making processes from accountability processes, which can result in somewhat meaningless decisions when

⁴⁰ Peters (1998). "Managing Horizontal Government: The Politics of Coordination." Canada: Canadian Center for Management Development. Research Paper No. 21.

⁴¹ Powell, W.W. (1991). "Neither market nor hierarchy: network forms of organization." Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds) *Markets, Hierarchies and Networks*. London: SAGE Publications: 265-276.

⁴² Kenchington and Crawford (1993).

⁴³ Mitchell, J. (1991). "Hierarchies: Introduction." In: Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds) *Markets, Hierarchies and Networks*. London: SAGE Publications: 105-107; and Powell (1991): 265-276.

⁴⁴ Peters (1998): Research Paper No. 21.

⁴⁵ Bennett, E., Neiland, A., Anang, E., Bannerman, P., Atiq Rahman, A., Huq, S., Bhuiya, S., Day, M., Fulford-Gardiner, M. and Clerveaux, W. (2001). "Towards a better understanding of conflict management in tropical fisheries: evidence from Ghana, Bangladesh and the Caribbean." *Marine Policy*, 25 (5): 365-376; Metcalfe (1994); and Peters (1998): *Public Administration*, 76 (Summer): 295-311.

assessed against implementation objectives.⁴⁶ Australia has adopted a version of the hierarchy approach whereby the Council of Australian Governments (COAG), as the central body, establishes the guidelines for national policy, and the Commonwealth, states and territories retain autonomous control over most policies and programs within their jurisdiction, which should be consistent with the national policy. However, Australian states have the legal authority, subject to the constitution, to make decisions not in line with the COAG national policy guidelines.

Despite many overlaps, markets are the most commonly used alternative to hierarchical integration and are applicable in circumstances where participating parties may have contradictory interests, yet have something to gain by engaging in an exchange or bargaining process.⁴⁷ Relative to hierarchies, markets provide for decentralised coordination through a high degree of flexibility in the coordination of separate activities, whereby individual parties pursue their own interests and the interaction between parties inadvertently produces a collective outcome.⁴⁸ Markets require minimal trust or ongoing relations between parties, yet are relatively dependent on other integration modes, such as networks, and agreements are generally supported by the power of legal sanction.⁴⁹ The success of markets for integration depends on the willingness of participants to exchange independent resources to attain higher levels of collective welfare.⁵⁰ These exchanges do not necessarily involve money as the primary commodity – this is especially true for the public sector, which more commonly uses information exchanges – hence are often referred to as ‘quasi-markets’ instead of markets in the conventional sense of the word.⁵¹ Market failure occurs when the exchange commodity fails to bring about the social optimum. That is, when perfect competition is broken and private interest succeeds over public interest.⁵² Policy formation based on a strong legislative or entitlements basis for citizens might also be damaged by market exchanges if the goals achieved through mutual adjustment by the participating parties are different from those intended by the legislators or implementers.

⁴⁶ Jaques, E. (1991). “In praise of hierarchy.” In: Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds) *Markets, Hierarchies and Networks*. London: SAGE Publications: 108-118.

⁴⁷ Peters (1998): Research Paper No. 21.

⁴⁸ Mitchell (1991): 105-107; and
Powell (1991): 265-276.

⁴⁹ Levacic, R. (1991). “Markets: Introduction.” In: Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds) *Markets, Hierarchies and Networks*. London: SAGE Publications: 21-23; and
Powell (1991): 265-276.

⁵⁰ Peters (1998): *Public Administration*, 76 (Summer): 295-311.

⁵¹ Peters (1998): Research Paper No. 21.

⁵² Dubbink, W. and van Vliet, M. (1996). “Market regulation versus co-management.” *Marine Policy*, 20(6): 499-516; and
Levacic (1991): 21-23.

Networks are defined as specific types of ongoing relations linking a defined set of persons, objects, or events.⁵³ Networks are characterised by: the social behaviour, or intrinsic characteristics of the components; the level of integration between the components; the interdependence of network components; the formality of network structures and relationships; and the instruments used to achieve integration within the network.⁵⁴

Professionalism implies that there is an interest and commitment by individuals to do their jobs well by networking with other professionals and anyone required to fill in the gaps of the networks formed inside the organisation or public sector itself.⁵⁵ This is advantageous to integration on the one hand, through the ready-made networks upon which the public sector may draw information. However, if networks are too tightly integrated internally they can become too insular, proving difficult for external management of the players in the network, thereby leaving little capacity for integration across networks, or for external scrutiny of policy formation.⁵⁶

1.2.3 Structures to achieve integration

The structures available to help achieve integration vary widely and are not necessarily independent of each other. Each uses a combination of hierarchies, markets and networks in an effort to achieve a level of integration that suits the purpose of the issue at hand, whether this be minimalist cross-referencing or striving for the maximalist view of all-encompassing integration.⁵⁷ Structural changes alone, however, cannot produce the changes in behaviour required for integration. There must be a clear will to change and coordinate activities for any integration initiative to be successful.⁵⁸ This extends to the political will of Ministers, without which any structural change to aid integration would be futile.

Several other aspects of planning and administration can also significantly contribute to effective integration. The timing of integrative initiatives is very important as is the level at which it is pitched. The lower echelons of governments and other organisations are generally more concerned with the provision of public service and are therefore better positioned to negotiate ideas to coordinate or integrate with 'competitors' than at the top, where budgetary issues and political concerns generally dominate deliberations.⁵⁹

Integration is often more readily accepted if governments and organisations use more

⁵³ Knoke, D. and Kuklinski, J.H. (1991). "Network analysis: basic concepts." In: Thompson, G., Frances, J., Levacic, R. and Mitchell, J. (eds) *Markets, Hierarchies and Networks*. London: SAGE Publications: 175.

⁵⁴ Knoke and Kuklinski (1991): 173-182; and Peters (1998): *Public Administration*, 76 (Summer): 295-311.

⁵⁵ Peters (1998): Research Paper No. 21.

⁵⁶ Peters (1998): *Public Administration*, 76 (Summer): 295-311.

⁵⁷ Powell (1991): 265-276.

⁵⁸ Peters (1998): Research Paper No. 21.

⁵⁹ Ibid.

informal bargaining techniques for negotiating terms and conditions, rather than the prescriptive hierarchical top-down approach. However, due care must be taken by governments in handing over this negotiating power so that all parties understand the value of integration and the intent of government policies and practices. Any negotiated outcome, therefore should be in line with government policies and approaches.

In schematic terms, integration can be conceptualised on several different planes. Vertical integration occurs between the different levels in a hierarchical system. This can either be between management levels within the one organisation, department or government, or between governments and organisations that operate in a form of nested governance. A consensual approach to management is important in integrating, or coordinating, jurisdictional management. However, central governing bodies will rarely cede complete decision-making authority to an independent or disassociated body.⁶⁰

Horizontal integration can occur between departments, sectoral organisations, or interest groups that are charged with the management of different aspects of the same sector or program. Horizontal integration, however, can also occur in a positive feedback loop, whereby these departments, sectoral organisations or interest groups manage different sectors or programs that have the potential to impact other sectors or programs. This type of horizontal integration usually involves working towards a common objective for all the sectors.

In Australia, the potential for vertical integration occurs between the Commonwealth, states/territories and local government, but also within each tier of government such that integration may occur at the high-level policy formation stage or further down the echelons at the implementation stage. In fisheries, for example, vertical integration occurs through the Australian Fisheries Management Forum, which is charged with developing and reconciling national approaches to fisheries management that cross jurisdictional boundaries. Vertical integration occurs also within the Australian Fisheries Management Authority, charged with the day-to-day management of Commonwealth fisheries, such that individual fisheries managers must comply with overarching agency policies and arrangements. Horizontal integration occurs in Australian fisheries for example, through resource sharing initiatives to determine allocation and management arrangements between different users of the resource. There is also potential for horizontal integration between sectors involved in the management of Australia's oceans and its resources.

⁶⁰ Kenchington and Crawford (1993).

A discussion follows on existing structures currently available to achieve integration in Australia. These structures are presented to help define the concepts through examples and to highlight the substantial use of these structures in current management practices.

1.2.3.1 *Cross-jurisdictional integration*

Cross-jurisdictional integration means that the system works towards consistency across-jurisdictional boundaries where it impacts on the same resource, activity or ecosystem.⁶¹ It provides for coordination between jurisdictions such as local government, states/territories/provinces, Commonwealth/Federal, and nation states. Some examples of cross-jurisdictional structures used in Australia include:

- The Council of Australian Governments (COAG) – which meets annually and is the peak non-financial inter-governmental forum in Australia, comprising the Prime Minister, Premiers, Chief Ministers and the President of the Australian Local Government Association (ALGA).⁶² The role of the COAG is to initiate, develop and monitor the implementation of policy reforms that are of national significance and require cooperative action by Australian governments.⁶³ Issues are raised for consideration by the COAG from Ministerial Council deliberations, international treaties that may affect the states and territories or when the major initiatives of one government, particularly the Commonwealth, are likely to impact on other governments.⁶⁴
- Commonwealth-State Ministerial Councils – which are designed to facilitate consultation and cooperation between governments with respect to specific policy areas.⁶⁵ Ministerial Councils usually refer to annual or biannual formal meetings of Ministers of the Crown from several jurisdictions, usually including the Commonwealth and the states and territories, but may extend to New Zealand, in the case of trans-Tasman issues, and to Papua New Guinea.⁶⁶ Although meetings only occur once or twice a year, issues are regularly settled outside this formal forum via correspondence. Guidelines for the establishment of new Ministerial Councils and the broad protocols and general principles for their operation have been developed

⁶¹ Foster, E. (unpublished). "Evaluation of Alternative Models." Consultancy report for the National Oceans Office, 2003. (see Appendix One for signed permission forms).

⁶² Commonwealth of Australia. (2002). "Commonwealth-State Ministerial Councils – A Compendium." Canberra: The Department of the Prime Minister and Cabinet. June 2002.

⁶³ Australian Government. (2003). "The Council of Australian Governments (COAG) Framework." Department of the Prime Minister and Cabinet website. <http://www.pmc.gov.au>

⁶⁴ Commonwealth of Australia (2002).

⁶⁵ Moore-Wilton, M. (1999). "The State of Inter-Governmental Relations." Speech delivered to the National Policy Forum. 26 November 1999.

⁶⁶ Commonwealth of Australia (2002).

by the COAG. Ministerial Councils are free to determine their own rules and procedures so long as they are consistent with these documents. Ministerial Councils are established to initiate, develop and monitor joint policy reform, reform for consideration by the COAG or to oversee implementation of policy reform as instructed by the COAG.⁶⁷

- A standing committee of officials – which consists of the relevant sectoral Heads of the Commonwealth, state and/or territory agencies to support each Ministerial Council and the COAG. Standing Committees generally meet more regularly than Ministerial Councils to develop issues for consideration by the Ministers and also for the opportunity to work through and settle issues of less significance. Standing Committees may establish sub-committees, working groups and task forces to help the Standing Committee address particular policy issues, highlighting the vast amount of activity towards cross-jurisdictional integration that happens underneath the formal COAG framework.

1.2.3.2 *Cross-sectoral integration*

Cross-sectoral integration assists multiple-users to reach an acceptable balance of outcomes across the full range of uses.⁶⁸ A corollary of cross-sectoral integration is attempting to understand the cumulative impacts of the relevant sectors. Cross-sectoral integration can be evidenced by the involvement, or consideration of various government departments or sectors in decision-making, through the development of inclusive lateral structures that take precedence over traditional departmental boundaries.⁶⁹ Furthermore, the application of cross-sectoral integration should ideally be coordinated and strategic between departments. Some examples of cross-sectoral integration structures used in Australia include:

- Increasing demands for environmental monitoring and ecosystem-based management, which have emphasised the need to integrate government policies and programs across sectors and departments. Interdepartmental Committees (IDCs) are one approach used by the Australian Government to meet these rising challenges. IDCs comprise departmental representatives, with the authority to act on behalf of the department that they represent. They come together to discuss and advance issues that deviate from traditional sectoral management and require cross-sectoral consideration.

⁶⁷ Australian Government (2003).

⁶⁸ Foster (unpublished).

⁶⁹ Considine (1992).

- Cross-sectoral integration at an officer level between departmental and agency employees. Since this level of integration is usually informal, however, its success in achieving cross-sectoral integration is dependent on the networks that the negotiating officer has to ensure all relevant parties are consulted. The structure of the public service also contributes towards the coordination of government policies and programs. The public service system in Australia is based on the Westminster system of governance and as such there is relatively frequent movement of public servants among departments as they work their way up the hierarchies.⁷⁰ This frequent movement between and within departments and policy areas contributes to the possibility of generating integration or policy coordination through the knowledge of a variety of programs and policies.

1.2.3.3 *Intra-sectoral integration*

Intra-sectoral integration refers to the integration of multiple-uses within a sector to reach an acceptable balance of outcomes across the full range of uses, users and values within that sector.⁷¹ It provides for the coordination of policies and programs of different departments and agencies managing the same resource or sectoral interest in a balanced and equitable manner, such that the outcome will benefit all user groups, but not to the detriment of the resource. Some examples of intra-sectoral integration structures used in Australia include:

- Horizontal integration between departments and agencies responsible for management and policy within the same sectors (for example, the Australian Fisheries Management Authority and the Department of Agriculture, Fisheries and Forestry with respect to fisheries management and policy development), which can be compromised by an overlap in work agendas. Vertical integration within departments and agencies, that is between the policy or management officer at the bottom and the executive level staff and Ministers at the top of the hierarchy, is dependent on the communications strategies of departments and often comes down to personal interests and agendas. There is sometimes conflict caused by the conventional view that Ministers and executive staff exercise power and control over programs they know little about with respect to serving the public good, and that departments and agencies have very narrow views on policy, failing to see the need to impose overall priorities for government.⁷²

⁷⁰ Peters (1998): Research Paper No. 21.

⁷¹ Foster (unpublished).

⁷² Peters (1998): Research Paper No. 21.

- Departments and agencies, which in carrying out their duties, may establish various structures to aid integration, both within and between departments and agencies with respect to coordinating management and policy agendas. Some of the structures available for use include working groups, advisory committees and taskforces. Generally speaking, any decision-making structure will comprise government representatives from the appropriate departments or agencies to adequately deal with the issue at hand. In some cases, non-government representatives will be involved in discussions, but these discussions are generally geared towards advising decision-making rather than settling issues, due to fact that decisions affecting Government policy need to be made by the elected representatives whom have been entrusted with the power to act on behalf of the Australian public. Non-government representatives do not have the power to make these decisions, but they may have the power to advise on behalf of their constituents.

1.2.4 *Processes to achieve integration*

In addition to structures and a general and political willingness to achieve integration, there are a number of processes that can also contribute to its effectiveness. Budgets reflect the priorities of the government in monetary terms and as such, can be the most effective impetus to policy change, including that for integration.⁷³ The problem with a budgetary focus, however, is that individual departments and agencies are effectively competing for the same pool of money and this works in direct contrast to the concept of integration. So while a budget may establish a fund for integration, there are still going to be allocations within this that cause departments in the current sectoral climate to compete, rather than coordinate. This 'turf fighting' is not a new concept and, coupled with the risk of budget reductions across the board for integration, can entrench positions and work against integration.

Regulatory review is another process that can achieve integration without the need for the direct coordination of departments and agencies. Having an independent regulatory body to assess legislation and policy for duplication or counter-productiveness in meeting the overall priorities and goals of government, can act as a coordinating process towards a quasi-integrated system.

Another process currently used in some specific programs, is the evaluation of legislation and policies with respect to meeting their objectives and that of the government in that specific area.⁷⁴ This process could be extended to encompass the priorities and objectives for a region or target population, such as the oceans, and hence could potentially work

⁷³ Peters (1998): Research Paper No. 21.

⁷⁴ Ibid.

towards integration in this capacity. Limitations to this crosscutting evaluation, however, include the difficulties to establish and assess cumulative objectives and whether a specific program is meeting these objectives, given the variance in sectoral objectives that would be encompassed by such integration.

Recognition of the balance of values, usually inherent in any area of natural resource management, is imperative for the development of successful integrated management plans or processes.⁷⁵ This type of management has been coined “triple bottom line” management and includes objective setting for a balance of environmental, economic and social values.⁷⁶ Other processes noteworthy for successful integrated management include: ecosystem-based management measures to ensure management is applied across a whole system, rather than confined by traditional jurisdictional boundaries; an inclusive partnership approach to decision-making and management; and adaptive management principles to ensure the system is responsive to the changing needs of the environment, economy or society.⁷⁷

In establishing appropriate integrated management practices, the costs and benefits of comprehensive integrated planning must be weighed against those of incremental change.⁷⁸ In terms of Australia’s oceans, this means weighing the development of Regional Marine Plans against traditional sectoral-based approaches towards ESD. The advantage of developing overarching integrated management plans is the capacity to address the broad needs of the whole region, the long-term aspirations for the region and the cumulative effects of many activities or uses.⁷⁹ However, incremental change allows for greater flexibility to react to changes in situations, new information, new understanding and new opportunities.⁸⁰ Regional marine planning has arguably changed focus from planning for the whole large marine ecosystem to planning through incremental change, in response to the enormous complexities of comprehensive planning and in recognition of cost-efficiencies. The focus is now on coordinating independent sectoral activities, with each sector planning for the ecosystem-based requirements of the region.

One potential disadvantage to integration in government is that accountability may be lost due to the difficulties in determining, if things go wrong, where in fact the break down occurred. This relates directly to the financial accountability of all government departments that spend money on behalf of the Australian public. Financial accountability becomes

⁷⁵ Kenchington and Crawford (1993).

⁷⁶ Potts, T. (2004). “Triple Bottom Line Reporting – A Tool for Measuring, Communicating, and Facilitating Change in Local Governments.” A Paper for the Effective Sustainability Education Conference. NSW: Sydney.

⁷⁷ Kenchington and Crawford (1993).

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

somewhat difficult to enforce if several departments contribute to a combined fund or merge to combat difficult policy issues. Likewise, individual departments support the credibility of cooperative action when integration produces a positive outcome.⁸¹ It is therefore important that departments or organisations are brought together on equal terms and that the lead agency does not hold all the power.

1.2.5 Integration in the context of Australia's fisheries and oceans

In the context of Australia's oceans, integration aims to achieve a cohesion of ocean-related activities by changing the past habits of sectoral management, while combining the knowledge of the oceans from all users in order to manage our activities more effectively and in harmony with the environment. A number of coastal and marine initiatives have been developed in Australia in the past decade. These have culminated in recent developments, such as regional marine planning to implement *Australia's Oceans Policy* and the proposed *National Coastal Policy*, which have highlighted the need for oceans management reform, recognising cross-jurisdictional and cross-sectoral interests in the marine environment.

There are many faces to integration, including: environment-economy integration; integrated culturing; science-management integration; sectoral integration; and jurisdictional integration. Due to the complexity of Australia's constitutional division of powers and the traditional sectoral nature of resource management, the sectoral and jurisdictional aspects of integration are most appropriate for analysis in this thesis. Application of these concepts to oceans and fisheries management is described below, but it is recognised that there are many other faces of integration that will comprise effective fisheries and oceans management reform in Australia.

1.2.5.1 Cross-jurisdictional integration of Australia's oceans management

In Australia, cross-jurisdictional integration with respect to oceans management refers to the cooperation of governments and the potential cohesion of Commonwealth and state/territory regimes in recognition of the land-coast-sea continuum. Drawing on counterfactual analysis of other countries and natural management regimes, this thesis examines some of the cross-jurisdictional structures and processes used in Australia and proposed under the new integrated oceans management regime to determine the level of integration that is achievable. It proposes a number of further developments that will enhance Australia's capabilities to integrate oceans management across jurisdictional boundaries.

⁸¹ Considine (1992).

1.2.5.2 *Cross-sectoral integration of Australia's oceans management*

The Australian system of governance is based on sectoral management. Over the last few decades there has been increasing international recognition of the need to manage our oceans holistically, taking into account the cumulative impacts of oceans activities and resource use. As an international leader, Australia has taken on this challenge and recognised the need to manage its oceans across all sectors. Drawing on counterfactual analysis of other countries and natural management regimes, this thesis highlights some of the significant advances Australia has made towards cross-sectoral integration of its oceans uses and proposes other avenues to enhance its capabilities towards this end.

1.2.5.3 *Cross-jurisdictional integration of Australia's fisheries management*

It is well recognised that fish know no jurisdictional or administrative boundaries. Therefore, to manage our fisheries resources according to jurisdictional boundaries is illogical and would be to the detriment of the stock and the fishing industry, which depends on these stocks. Australia has devised several approaches to deal with the inherent problems of managing species across jurisdictional lines. Drawing from international experience, this thesis examines these processes and approaches for their adequacy in achieving cross-jurisdictional integration of fisheries with respect to the sustainable use of the stock and suggests changes to enhance coordination.

1.2.5.4 *Cross-sectoral integration of Australia's fisheries management*

Fisheries are well established for integration into regional marine planning. However, with increasing demands on fisheries to prove their ecological sustainability against ecosystem-based criteria, fisheries have to take on a more cross-sectoral approach to management, considering the needs of other user groups and non-consumptive users of the resource. This thesis examines the increasing pressures on fisheries and determines the adequacy of current management arrangements in meeting these increasing demands.

1.2.5.5 *Intra-sectoral integration of Australia's fisheries management*

Australian fisheries are increasingly being assessed against ESD principles and as such, the Australian Government has recognised the need for the various fishing sectors, such as recreational, indigenous and commercial, to integrate their allocation and management processes. This thesis examines these ongoing processes and the complications inherent in multi-party management of the resource.

1.3 Conflict management

Integrated oceans management has implicitly focused on the use of conflict management processes and has highlighted the need for more sophisticated conflict management techniques to be adopted.⁸² The establishment of cross-jurisdictional, intra-sectoral and cross-sectoral decision-making bodies has brought, often opposing, parties together to discuss issues of common interest in an attempt to find agreeable solutions. This process is at the very essence of conflict management and has been practiced in government for decades, but without any conflict management training or due recognition. Advanced training and information sharing, with respect to conflict management techniques and practices, can potentially save government both time and money. It is important that the paradigm shift from sectoral-based management towards integration is accompanied by sound conflict management arrangements to ensure a smooth transition. There are well developed reactive processes in place and precedents from which lessons can be learned. It is now time, however, to concentrate on the development of more proactive management tools to combat conflicts, through integrated management, before they arise.

1.3.1 What is conflict?

Conflict is a situation of non-cooperation between parties with conflicting objectives.⁸³ Conflict has traditionally been associated with negative connotations, but is now recognised for its positive potential with respect to social change.⁸⁴ Conflict poses the risk of driving conflicting parties apart, yet on the other hand, offers opportunity to develop new and more creative solutions that better satisfy the needs and concerns of all parties involved.

The source or 'root' cause of conflicts varies according to the circumstances from which they arise. The usual sources are from areas with fragmented management, where values of different parties differ; conflicts that arise as a by-product of an activity; the competition for resources; and spatial or temporal competition.⁸⁵ The hardest conflicts to resolve or manage are the philosophical conflicts, those conflicts that arise from actors with different values and objectives wanting to use or protect the same resource. This is for example, the case of the conservationist fishers that want to sustainably use marine resources for industry development and intergenerational equity versus the protectionist environmentalists that want to protect the marine resources for their intrinsic value and 'right' for life. Neither

⁸² Considine (1992).

⁸³ CEMARE. (2000). "The Management of Conflict in Tropical Fisheries." United Kingdom: University of Portsmouth. Research Project R7334.

⁸⁴ Hinkley, L. and Reckseik, H. (2003). "MPA Perspective: Managing conflict with and among user groups: winning strategies for MPA managers." *MPA News*, 4 (10): 6.

⁸⁵ Johnson, J.C. (1989). "Introduction to managing marine conflicts." *Ocean & Shoreline Management*, 12 (3): 191-198.

view is wrong, nor is either view necessarily right. This is where appropriate management of the resource, but more importantly, of the actors involved will reduce the conflict.

The appropriate analysis of a conflict will identify the information required for effective management of the conflict. Conflict analysis includes the identification of the source or 'root' cause of the conflict. Often this step is washed over in the quest for quick fixes to hide or avoid dealing with the true source of the conflict, which may require large amounts of resources or time, or be beyond the scope of the government of the day. Conflict analysis also involves the identification of the actors involved in and affected by the conflict. These actors are often not prominent, and can be inadvertently left out of the negotiation process, which can lead to increases in conflict down the track when they finally join the process. The sensitivity of the conflict to various solutions can be determined, bearing in mind that most solutions are meaningless without the funds or means to implement them. The tractability of the problem must also be determined, as it is unproductive to try to resolve a conflict that cannot be resolved.⁸⁶ In this situation, it may be better to invest more resources into appropriately managing the conflict. Once the actors, conflict and tractability of the problem have been defined, it is important that actors develop a comprehensive understanding of the problem together and generate a list of all the possible solutions to the problem for consideration by the other relevant actors.⁸⁷ With this information, decision-makers can make management decisions that will contain the conflict, sometimes resolve it and perhaps even turn an inherently negative conflict into a positive driving force for management and compliance.

Environmental conflict can be a result of many compounding issues. For example, environmental conflict can be a result of: conflicting objectives, for instance through the conservationists desire to protect ecosystem health as opposed to the fishers' desire to make a living; a lack of knowledge or research; or of resource scarcity due to degradation, population growth, supply and demand, or unequal social distribution of resources.⁸⁸ The exact cause of many environmental conflicts is largely unknown. This is due to the scarcity of baseline information about many resources and the fact that impacts may not be felt for generations, thus causing the potential for conflict down the track when it is too late. As with many other conflicts, environmental conflicts can involve: large numbers of participants; a lot of emotion; being highly politicised; very drawn out negotiations; and power imbalances.⁸⁹ Environmental conflict is generally characterised by being somewhat more complex than humanitarian conflict as it does not just involve lives, but rather the

⁸⁶ Johnson (1989).

⁸⁷ Hinkley and Reckseik (2003).

⁸⁸ Langholz, J.A. (2003). Speaker: The 2003 International Student Symposium on Negotiation and Conflict Resolution. The Hague, The Netherlands: August 8, 2003.

⁸⁹ Ibid.

general health of the environment and function of the ecosystem as well.⁹⁰ Many environmental conflicts are based on sketchy scientific information at best, with best available information and counter-research continually feeding into the information base.⁹¹

1.3.2 What is conflict management?

Conflict management is the constructive way of dealing with opposing objectives. This can include preventive techniques, alternative dispute resolution methods or traditional adjudication.⁹² Conflict management within itself is a contentious issue, with some believing that disputes are non-productive, costly and damaging.⁹³ An alternative view of conflict is that, when managed effectively and when political and economic 'elites' show support, conflict can be very productive and cost efficient, incorporating conflicting opinions and views in a management regime agreeable to all interested parties.⁹⁴ It effectively can eliminate the tyranny of many decision-making processes. Conflict is the possible outcome of social diversity and this can indicate a healthy society, in which it is reasonable to expect some conflict.⁹⁵ The most difficult issue to overcome with conflict management is that personalities often overshadow negotiations, which often come down to political pressure and/or personal agendas.⁹⁶

Conflict management recognises that planning is an open, ongoing and adaptive activity.⁹⁷ It involves the process of demand assessment and scenario setting, whereby all participants leave negotiations feeling that their interests have been fairly considered. Conflict management also recognises that the *perceptions* held by stakeholders are the true drivers of agency decisions.⁹⁸ Conflict management, rather than conflict resolution, is used in this study to indicate the somewhat healthy nature of well managed conflict in management today. Not all conflicts need to be resolved and, in fact, not all conflicts can be resolved so it is non-productive, costly and damaging to try and resolve intractable conflicts. For example, in the broad context of fisheries, conservationists generally keep fishers honest and the fishers generally keep conservationists from over regulating day-to-day activities. This is an example of management rather than the resolution of conflict as the conflict is philosophical with no clear resolution. The parameters of the conflict and its management are continually

⁹⁰ Langholz (2003).

⁹¹ Ibid.

⁹² Fels, A. (1999). "The Growing Importance of Conflict Management." *Canberra Bulletin of Public Administration*, 92: 21-23.

⁹³ Ibid.

⁹⁴ Bennett *et al* (2001).

⁹⁵ Weeks, D. (2003). Speaker: The 2003 International Student Symposium on Negotiation and Conflict Resolution. The Hague, The Netherlands: July 22, 2003.

⁹⁶ From interview with subject TC16.

⁹⁷ Irland, L.C. (1975). "Citizen Participation – A tool for conflict management on the public lands." *Public Administration Review*, May/June 1975: 263-269.

⁹⁸ Ibid.

changing with increased knowledge of the resource and environment, but the parties' perception of the resource, thus their objectives with regard to its sustainable use, will not change.

The aim of conflict management is to achieve productive harmony in a potentially volatile situation. In doing so it is important that the views or opinions of any disputing party are not compromised beyond that to which they agree, nor too should the lowest common denominator be enforced so as to deem any resultant management decision ineffectual.

Conflict management should acknowledge the emotion involved in conflict and establish ground rules for engagement between parties. Conflict management should not focus on what divides the parties, but rather should be based on commonalities, or a creative way of illustrating the benefits that differences may bring.⁹⁹ It is important that parties recognise and focus on the broader context in which their 'argument' lies. This will reduce the tendency for emotional nitpicking of details. One way to achieve this is to identify a common goal or objective for the parties concerned and to focus on reaching this common goal throughout the session.

1.3.3 *Conflict management tools*

Conflict management comes in many forms, including prevention, negotiation, mediation, conciliation, arbitration, litigation and enforcement. Each conflict scenario dictates the specific tools or culmination of tools required to address the dispute at hand. In determining which tools to use to address the conflict, certain factors should be considered such as: the cost of the process; the number of parties involved; the complexity of the dispute; if confidentiality is to be maintained; if the parties want direct negotiations and if they want a continuing relationship; whether there is a need for binding resolution; and whether the dispute involves expert or legal issues where a precedent is desirable.¹⁰⁰

Some basic strategies for conflict management or resolution are:

- to get parties to agree on something – *anything* – as a starting point for negotiation. Often they soon realise that they have the same ultimate objectives but are simply approaching it from different perspectives. By working together, they can make robust management plans that will ultimately meet all their objectives;
- to dissociate the people from the problems and not turn the conflict into a personal attack on any individual or group involved in the conflict;

⁹⁹ Weeks (2003).

¹⁰⁰ Fels (1999).

- to admit to mistakes that have been made. This is especially important for government, where past policies and management plans have not worked as planned; and
- once a solution is agreed upon, it is most important that effective implementation strategies are enforced and that parties can see the results through effective monitoring and adaptive management.¹⁰¹

In some instances, conflict management tools are used inappropriately to mask the underlying source of the conflict. This situation may occur when conflict is so volatile that 'quick fixes' are required to save lives or divert environmental disasters, when time or monetary constraints prevent in-depth research, or when governments want to make political statements. Whilst some 'quick fixes' can be counter productive, some can 'band-aid' the situation and alleviate any immediate pressures, hence leaving open the path to resolve the deep-seated conflict.

As we move towards a more holistic approach to natural resource management, it is evident that a shift away from traditional reactionary conflict resolution to more proactive conflict management is required. The more creative Alternative Dispute Resolution (ADR) practices are increasingly replacing contemporary adversarial conflict management, with mediation of some commercial disputes costing as little as 5% of litigation or arbitration.¹⁰² ADR practices generally involve processes that focus on building ongoing relationships and longer-term conflict management solutions.¹⁰³ ADR practices provide alternatives to lengthy and cumbersome litigation measures and rely on participants' willingness to negotiate an agreeable solution. Some believe that ADR practices have been used all along and the only difference now being that these practices have been given formal labels.¹⁰⁴

ADR practices can allow for a tailored solution encompassing all parties' interests. They can give the parties a greater sense of ownership of the outcome, hence a greater commitment to abiding by the solution.¹⁰⁵ The processes can be voluntary and if any party is not satisfied, they can easily withdraw. The processes are also usually faster and can lead to better future relations between parties than litigation measures. However, some ADR practices are not legally binding. For example, if a mediating party does not abide by the agreement reached

¹⁰¹ Hinkley and Reckseik (2003);
 "Insights into negotiation." Johns Hopkins University. Paul H. Nitze School of Advanced International Studies – Guidelines for Negotiations. *Handout* given at The 2003 International Student Symposium on Negotiation and Conflict Resolution. The Hague, The Netherlands: July 21, 2003.

¹⁰² Fels (1999).

¹⁰³ See Sections 1.3.3.1 to 1.3.3.4 for some examples of ADR approaches.

¹⁰⁴ From interview with subject GJ62.

¹⁰⁵ Fels (1999).

in mediation, there is no legal recourse to make them do so. It would undermine the trust and ongoing relationship between parties of the mediation, but there would not usually be any legal ramifications.

1.3.3.1 Preventative conflict management

Government adopts preventative mechanisms through policy development, planning and coordination, networking, information systems and public consultation.¹⁰⁶ Policy development should involve public consultation throughout the process, however, the impact of consultation on the final policy product can be quite variable (see discussion on consultation in Section 1.3.3.8). Planning and coordination involves the assessment and inclusion of overall public interest in planning initiatives. Planning should be open and transparent, consider all competing demands, attain legitimacy through the inclusion of all interested parties, and have an accessible appeals process.¹⁰⁷ Networking is essential for effective preventative conflict management. By informing all the relevant players, it effectively takes away the element of surprise that often instigates fiery responses and induces conflict. Developments in information and communication technology have meant that information is more readily available and processing and decision-making based on information dissemination is more timely. It is necessary for any governing body to provide open and transparent means of gaining access to information and to clearly illustrate the process of decision-making to attain the legitimacy necessary in a process to enhance compliance. These processes all link to the need for appropriate public consultation where the public have an active role in decision-making, rather than the public rights of appeal on decisions that have already been made.¹⁰⁸

A recent example of preventative management is the work towards developing a Commonwealth recreational fishing policy through a mediated workshop. This process not only involved recreational fishers, including recreational anglers and game/sport fishers, but also indigenous fishers, commercial fishers, the aquaculture industry, tourism representatives, conservationists and Federal and state government representatives. As a public resource, it is also of great importance that the process is open and transparent to the general public, with opportunities for the public to actively participate in negotiations. However, it is becoming increasingly apparent that even this process is under political

¹⁰⁶ Commission of Inquiry into the Conservation, Management and Use of Fraser Island and the Great Sandy Region and The Cabinet Office of New South Wales. (1990). "Public Issue Dispute Resolution – A Joint Discussion Paper."; and
From interview with subject XU11.

¹⁰⁷ Commission of Inquiry...(1990).

¹⁰⁸ Ibid.

influence, whereby it is being advanced rapidly to meet with political deadlines, a move some involved in the process see as a demise to the effectiveness of the process.¹⁰⁹

1.3.3.2 *Negotiation*

Negotiation is a voluntary bargaining process between parties designed for them to reach agreement.¹¹⁰ Negotiation requires good communication and manipulation skills and a willingness to listen.¹¹¹ A good example of a negotiation process is the ‘Salamanca Agreement’ process, an unassisted negotiation process designed to break the deadlock of agreement over forest management in Tasmania.¹¹² The Salamanca Agreement was signed by representatives of: the Forest Industries Association of Tasmania (FIAT); the Wilderness Society and the Australian Conservation Foundation – later combined to form the Combined Environment Groups (CEG); the Tasmanian Trades & Labor Council (TTLC); the Tasmanian Farmers and Graziers Association (TFGA); the Tasmanian Forestry Commission (TFC) and the Tasmanian State Government.¹¹³ The Salamanca Agreement committed all parties to work together over a 12-month period towards developing a long-term strategy for forest management in Tasmania that proved legitimate to all negotiating parties. This process was institutionalised in 1990 with the establishment of a Ministerial Council, which was called the Forests and Forest Industry Council of Tasmania (FFIC).¹¹⁴

There is a risk in negotiation of reaching an ineffectual lowest common denominator agreement. It is important to emphasise commonalities and work on these to reach agreement rather than going directly for the bottom line.¹¹⁵ All parties cannot be satisfied if relative gains are the measure of success. If there is an emphasis on achieving common goals with each party getting enough gains to keep an agreement, this will often result in rapid settlement of any dispute.¹¹⁶

¹⁰⁹ From interview subject FO33.

¹¹⁰ ADR Associates, L.L.C. (2003). “IIMCR Mediation Training - manual.” Washington. 23-25 July 2003: 2.

¹¹¹ Zartman, W. (2003). Speaker: The 2003 International Student Symposium on Negotiation and Conflict Resolution. The Hague, The Netherlands: July 21, 2003.

¹¹² Sandford, R. (1991). “Conflict management, dispute resolution and ecologically sustainable development.” ACT: Department of The Arts, Sport, The Environment, Tourism and Territories.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Zartman (2003).

¹¹⁶ “Insights into negotiation.”: July 21, 2003.

1.3.3.3 Mediation

Mediation involves a neutral or impartial third party helping disputant parties to reach their own voluntary, negotiated resolution or amicable settlement to a dispute.¹¹⁷ Mediation offers one means of turning acrimonious negotiations into constructive and productive sessions, by turning the negotiation into a win-win situation in the search for an 'integrative' solution.¹¹⁸ Mediations are usually voluntary and not legally binding in themselves, but the outcomes of the mediation may later be grounded in legislation or policy. Mediation must be consensual, based on trust and confidentiality must be assured.¹¹⁹

The role of a mediator is to facilitate discussion towards resolving conflict and to steer parties away from hardening their positions. A mediator, however, has no power to impose a solution on parties.¹²⁰ Mediation ranges from minimal active interference, such as simply physically bringing the parties together, to active participation whereby the mediator may convene workshops and provide summaries of discussions held, still all without imposing any decisions or judgements.¹²¹ Mediators can also make use of separate meetings with parties, often referred to as caucuses, to allow parties to vent emotion or to ensure that parties are satisfied with the progress.¹²²

The purpose of a mediation session is not to assign blame or enter into a win-lose argument, but rather it aims to give parties the opportunity to:

- vent and diffuse emotion;
- clear up misunderstandings;
- determine underlying interests or concerns;
- separate needs and wants of parties; in order to
- find areas of agreement; and
- incorporate these areas of agreement into solutions that satisfy all parties' needs.¹²³

The most demanding role of a mediator may be the out of session preparations required for a successful mediation. This can involve: the reading, preparation and dissemination of any pre-mediation papers, agreements and briefs; organising the mediation logistics – including the room, refreshments and equipment; contact with all relevant parties; preparation of an

¹¹⁷ ADR Associates (2003):1; and Noortman, M. (2003). Speaker: The 2003 International Student Symposium on Negotiation and Conflict Resolution. The Hague, The Netherlands: July 22, 2003.

¹¹⁸ ADR Associates (2003): 2.

¹¹⁹ Noortman (2003).

¹²⁰ Fels (1999).

¹²¹ Commission of Inquiry...(1990).

¹²² Noortman (2003).

¹²³ ADR Associates (2003): 1.

opening statement; drafting of agreements; and any follow-up contact identified in the session to ensure the effective implementation of the agreement.¹²⁴ Often the mediator needs to identify and develop a ‘power-with’ approach, where it is identified exactly what the parties could achieve by working together, as opposed to what they could achieve by working against each other.¹²⁵ Sometimes the best way of doing this is by highlighting the best alternatives to a negotiated agreement and worst alternatives to a negotiated agreement (BATNA and WATNA).¹²⁶

One of the most important roles of a mediator is to keep the parties focused on the big picture of what they *need* to achieve from a mediation session collectively, rather than getting immersed in the detail of what each party *wants*. It is important for a mediator to separate the interests, or needs, of the parties from their positions, or desires when entering the session.¹²⁷ In doing this, the mediator can identify the essential points necessary to reach agreement and steer away from the non-essential desires the parties may have. As Mick Jagger once sang:

You can't always get what you want
But if you try sometimes
Well you might find
You get what you need.¹²⁸

Mediation begins with a welcome and, depending on the circumstances and the mediator's style, a reaffirmation of the positive first step parties have taken in choosing to enter into the mediation process. The mediator then should explain the mediator's role in the process and describe what the mediation process will entail, including appropriate mediation agreements and ground rules as the mediator sees fit. Parties, starting with the party that instigated the mediation, should then be invited to explain what it is that brought them to the mediation process.¹²⁹ From here, the mediator can take control and caucus, or run a joint session, as they see fit until some agreement is reached. This implies that the mediator should be able to read the parties and the situation well enough to keep further conflicts under control. The mediator should also duly acknowledge any common objectives as a significant step forward for the negotiating parties.

¹²⁴ Noortman (2003).

¹²⁵ Weeks, D. "The Eight Essential Steps to Conflict Resolution." Tarcher/Putnam.

¹²⁶ ADR Associates (2003): 27-28.

¹²⁷ Ibid: 2.

¹²⁸ Jagger, M. and Richards, K. (1968). "You can't always get what you want."
http://www.keno.org/stones_lyrics/you_cant_always_get_what_you_want.htm [Access date: 5 January 2004].

¹²⁹ ADR Associates (2003); and ADR Associates training session in the Hague (2003).

Like many procedures of negotiation, mediation is evident in many Australian policy processes. The Recreational Fisheries Allocations Workshop, held in Coolangatta in October 2002, is an example of a well-run mediation.¹³⁰ The workshop was chaired by an independent chair (from South Africa) who had a clear understanding of the topic and was able to offer some insightful experiences and to clarify the various points being made, without imposing his own views on the subject of Australian recreational fisheries allocation issues. This workshop was, however, only a small part of the negotiation process involved in the development of a Commonwealth policy on recreational fisheries management.

1.3.3.4 *Conciliation*

Conciliation is an informal process whereby a neutral third party attempts to bring disputant parties to agreement by lowering tensions, improving communications, interpreting issues, providing technical assistance, exploring different solutions and bringing about a negotiated settlement.¹³¹ A conciliator will go further than a mediator by offering suggestions, opinions or expert advice, but will still not impose a solution on the parties involved.¹³² This form of negotiation is best used in situations where parties are unable or unwilling to directly negotiate. Although distinction is made between conciliation and mediation, it is very rare that a mediator will not try and impart suggestions or advice in order to move the situation along, hence the terms are often interchanged. For the purposes of this thesis both of these management tools are referred to as 'mediation'.

1.3.3.5 *Arbitration*

Arbitration is a quasi-judicial process whereby a neutral third party makes a binding decision on behalf of the parties involved. This process may allow for court appeals, however, such appeals slow the process such that it can fall in line with the litigation process.

1.3.3.6 *Litigation*

Litigation involves the resolution of disputes in court, generally with legal representation, in a win-lose situation. This traditional reactive form of conflict resolution is impersonal, relatively inflexible and provides little practical scope for dealing with natural resource management issues that often involve an element of value judgement and interpretive license.

¹³⁰ Personal observation.

¹³¹ Commission of Inquiry...(1990).

¹³² Fels (1999).

1.3.3.7 Enforcement

Enforcement is the detection of a breach of laws or by-laws by an authority and the proceedings that are consequently brought against the party at fault. This is generally associated with post-conflict management outcomes and is designed to ensure these outcomes are enforced. Enforcement is an essential support for any agreement made in negotiation or adjudication. If parties to an agreement feel that there is not adequate enforcement in place to maintain the terms of the agreement, then it renders it meaningless. Likewise, if laws and by-laws do not have sufficient enforcement, then they are more likely to be breached and become relatively ineffectual.

1.3.3.8 Public Consultation

An increasingly important area of conflict management with respect to natural resource management is involved with public consultation. Coupled with the holistic management of natural resources is a move towards more inclusive and legitimate decision-making. As guardians of natural resources that belong to the general public, the government has a duty to inform and consult with the public on management and regulatory issues. The type of community consultation adopted in any decision-making process will depend on the information and level of legitimacy required by the community to ensure effective implementation. Community consultation ranges from government-dominated informative consultation to community-dominated decision-making and management.¹³³ Co-management occurs somewhere in the middle of the spectrum whereby community, industry and government officials work together somewhere in the spectrum of an advisory to partnership role, to attain agreement that satisfies all parties.

Carson and Gelber (2001) identified the main principles of effective consultation required for successful management.¹³⁴ These are: appropriate timing in the development of the issue; to be all-inclusive of those impacted by decisions; parties should remain community-focused rather than individually-focused; consultation should be interactive and deliberative; consultation may only be effective if the process and the participants' roles are clearly explained; participants should have faith in the process that outcomes will be addressed adequately where appropriate; facilitators should be independent, skilled and flexible; the process should be open, fair and subject to evaluation; and it should be cost-effective and flexible to meet the circumstances.¹³⁵

¹³³ Pomeroy, R.S. and Berkes, F. (1997). "Two to tango: the role of government in fisheries co-management." *Marine Policy* 21 (5): 465-480.

¹³⁴ Carson, L. and Gelber, K. (2001). "Ideas for Community Consultation – A discussion on principles and procedures for making consultation work." NSW: NSW Department of Urban Affairs and Planning.

¹³⁵ Ibid.

Once these basic principles for effective consultation have been established, the next step in the consultation process is to decide on the method of selecting who to consult and how. Different circumstances and issues will require different consultation methods and the inclusion of different players. Random selection of participants, used in conjunction with an appropriate societal profile, offers opportunity for representative participation. Contemporary consultation methods have become dated, with participants in many cases feeling over-consulted and still unheard. It is therefore important for authority figures to develop innovative ways of consultation that include and utilise public perceptions. Some of these methods include the use of: search conferences, deliberative polls/televoting, citizen's juries, consensus conferences, focus groups, charrettes and resident feedback panels.¹³⁶

1.3.3.8.1 Co-management

Co-management can provide for the semi-private control of a public resource and as a strategy lends itself to the decentralisation of central government control.¹³⁷ Many forms of vertical decentralisation are evolving in the developed and developing world today. USA fisheries for instance exercise a form of deconcentration, or administrative decentralisation, whereby the national fisheries agency transfers authority and responsibility to eight regional fishery management councils established under the *Magnuson Act 1977*. Under the *Resources Management Act 1991*, New Zealand delegates some authority and decision-making powers to district officials, but Central Government retains the ultimate right to overturn these decisions. In Australia, we have devolved certain powers with respect to recreational and commercial fisheries management over to the states without a direct reference back to the Commonwealth. In Norway the government has formally given fishers responsibility for the regulation of the cod fishery under the *Lofoten Act* of the 1890s, with elected fishers acting as inspectors and a public agency as the enforcer.¹³⁸ In the Netherlands, the privatisation of fisheries is evident through the individual quota management system. In this system, the government sets a national quota and "management groups" of fishers then take on the management of these quota.¹³⁹

Resources such as fisheries are common property, as they are non-exclusive. It is therefore difficult to control access to the resource and each user of the resource effectively subtracts from the welfare of other users. In the absence of some form of property right pertaining to fisheries resources, these characteristics can lead to the "tragedy of the commons".¹⁴⁰ Once

¹³⁶ Carson and Gelber (2001).

¹³⁷ Mikalsen, K.H. and Jentoft, S. (2001). "From user-groups to stakeholders? The public interest in fisheries management." *Marine Policy*, 25: 281-292.

¹³⁸ Pomeroy and Berkes (1997).

¹³⁹ Ibid.

¹⁴⁰ Hardin, G. (1968). "The Tragedy of the Commons." *Science*, 162: 1243-1248.

some form of right to the resource is recognised and assigned, an appropriate form of management should be implemented. In the case of a common property resource, it seems only fit that a common property theory strategy such as co-management should be used. The co-management hierarchy in relation to fisheries management strategy ranges from government centralised rule, whereby fishers are informed of management decisions, to community self-governance and self-management, whereby fishers design, implement and enforce the rules and regulations upon advice from the government.¹⁴¹

Co-management has the potential to pre-empt conflict in natural resource management through participatory democracy, whereby the interested parties can take ownership of the management decisions made. By involving the resource users in management decisions, and in some cases devolving power to them, a greater sense of legitimacy, hence efficiency and compliance, can be achieved. However, co-management involves a high degree of trust between parties. Governments must trust that users can and will manage themselves well and in the interests of intergenerational equity if decision-making power is transferred to them. Users must also trust that governments will incorporate their concerns and ideas when consulted in the management process. There is a danger, however, in devolving too much power of a public resource over to a select few. The general public, conservationists and any other impacted parties must be able to readily access and assess the regulatory regime governing the use of their collective resources.

In Australian fisheries for example, Management Advisory Committees (MACs) embrace the concept of co-management in an advisory capacity to the AFMA Board. In theory, there is trust from the government that MAC members will disassociate themselves from their vested interests and make informed decisions that would be best for the fishery. Likewise, in theory there is trust from MAC members that the government will seriously consider their recommendations. The AFMA Board has recently come under review with respect to adequately addressing recommendations from the MACs and is now required to accompany any decision based on these recommendations with a reasoned response. Despite these theoretical relations, trust between MACs and the AFMA remains somewhat problematic. MACs are also coming under increasing scrutiny by non-members who are questioning members' impartiality and the representation of their interests, as non-members.

In other circumstances, conflicts over resources can *lead* to co-management. In these situations, governments turn to co-management as a means of responding to a management crisis. This reactionary management process can occur with the deterioration of the resource, conflicts between stakeholders, conflicts between management agencies and

¹⁴¹ Pomeroy and Berkes (1997).

resource users and general governance problems.¹⁴² Whether reactionary or preventative, co-management has the potential to save time and money through legitimising management processes and providing users with ownership of the management decision.

1.3.3.8.2 Stakeholder theory

In any participative process, it is important to select the appropriate stakeholders to suit the objectives of the process. Mikalsen and Jentoft (2001) describe the attributes of stakeholder theory, adapted from business management literature, as applicable to fisheries management.¹⁴³ In most processes, participatory stakeholder numbers are limited due to the enormity of legitimate interests in most management areas, which if all included, would make timely decision-making impossible. It is imperative for stakeholder salience to include the most appropriate stakeholder representatives to ensure ownership and legitimacy of the process. The salience of stakeholders involves preliminary ranking according to three stakeholder attributes: *legitimacy* (having legal, moral or presumed claims), *power* (being in a position to influence decision-making) and *urgency* (holding a position that demands immediate attention from managers).¹⁴⁴

Once ranked, stakeholders can be categorised into stakeholder types, which decision-making authorities can then use to decide which stakeholders to include in participatory consultation processes. Stakeholders possessing all three stakeholder attributes are classified as *Definitive Stakeholders* and as such have an unequivocal claim for integration into the process.¹⁴⁵ According to this theoretical framework, environmental interests in Australian fisheries have become Definitive Stakeholders, a point reflected by the inclusion of permanent environmental observers in fisheries management processes. The consideration of environmental issues in fisheries management is granted power through the strategic assessments of fisheries under the *Environment Protection and Biodiversity Conservation Act 1999*, legitimacy through the principles of sustainability and stewardship of a public resource and, arguably, urgency through the increasing number of overfished stocks and overcapacity of the industry. It is perceived, however, that as assessments are completed and findings incorporated into fisheries management strategies and plans, the urgency should subside and environmental interests representing these issues will once again become Expectant Stakeholders. The limited observer status of environmental interests in the

¹⁴² Ibid.

¹⁴³ Mikalsen and Jentoft. (2001).

¹⁴⁴ Adapted from: Mikalsen and Jentoft. (2001); and Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997). "Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts." *Academy of Management Review*, 22 (4): 853-886.

¹⁴⁵ Ibid.

management process was perhaps in recognition of this potential for a change in influence once the assessments had been carried out.

Expectant Stakeholders possess two out of the three stakeholder attributes and are generally active in the management process.¹⁴⁶ Further categorisation within this tier of stakeholder type gives an indication for how stakeholders will behave. Those with power and legitimacy will be the *Dominant Stakeholders* as their influence is assured. Generally their attributes dictate that managers will pay them the most attention.¹⁴⁷ Those with urgent and legitimate interests are *Dependent Stakeholders*, because they depend on other stakeholders and/or managers for the power to give rise to their claims.¹⁴⁸ The most precarious stakeholders, however, are those with the power and the urgency but who lack the legitimacy.¹⁴⁹ *Dangerous Stakeholders* are, for instance, extreme conservationists, whereby they have the power through the media to bring their urgent environmental concerns, which lay outside the objectives of current government policy or legislation, to the forefront of political decision-making. As such, this group needs to be identified by management to prevent the use of such dangerous power, but not so much that they are granted legitimacy through acknowledgement.¹⁵⁰

The final type of stakeholder is the *Latent Stakeholder*, who possess only one of the stakeholder attributes, hence has low stakeholder salience, being generally included in the management process at the discretion of management.¹⁵¹ Further categorisation of *Latent Stakeholders* can offer insights into the potential for stakeholders to impact on the process or to gain *Expectant Stakeholder* status. *Dormant Latent Stakeholders* possess power, but lack the legitimacy and urgency to use it.¹⁵² However, they do have potential power and as such should be monitored by managers for changes in the urgency or legitimacy of their claims. *Discretionary Latent Stakeholders*, possessing the attribute of legitimacy, and *Demanding Latent Stakeholders*, possessing the attribute of urgency, have negligible influence on the process and in the absence of any other attributes, pose no threat to managers if not consulted.¹⁵³

¹⁴⁶ Mikalsen and Jentoft. (2001).

¹⁴⁷ Mitchell, Agle and Wood (1997).

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Mitchell, Agle and Wood (1997).

¹⁵² Mitchell, Agle and Wood (1997); and Mikalsen and Jentoft. (2001).

¹⁵³ Ibid.

1.4 Framework of analysis

The information in this chapter forms the basis of analysis for the rest of the study. The first part of the analysis looks at the capacity for integration. That is, how the different States, models or processes address:

- cross-jurisdictional;
- cross-sectoral; and
- intra-sectoral integration.

These are qualitatively addressed in terms of:

- instrumental integration, such as through integrated policies and planning; and
- institutional integration, such as inclusive decision-making bodies and co-management structures.

Where appropriate, models are also ranked (from level 1-9) for their integration capacity in accordance with the Policy Integration Scale set out in Section 1.2.1. This will standardise and strengthen integrative capacity comparisons between models, bearing in mind that comparison is of a qualitative nature only.

The second part of the analysis looks at the capacity for conflict management. Firstly, the assessment draws on the tools proposed in Section 1.3.3, to identify those used by the nation, model or process to address conflict management. Conflicts are analysed in terms of the source of the conflict, the identification of relevant actors – drawing from the stakeholder theory analysis outlined in Section 1.3.3.8.2 – and the tractability of the conflict, all of which contribute to the possible solutions available to decision-makers to appropriately manage the conflict. In recommending appropriate conflict management tools the following issues are considered and the appropriate tool chosen according to the needs of the disputant parties and decision-makers: the cost of the process; the number of parties involved; which parties to involve – drawing from the stakeholder theory analysis outlined in Section 1.3.3.8.2; the complexity of the dispute; if confidentiality is to be maintained; if the parties want direct negotiations; if parties want a continuing relationship; whether there is need for a binding resolution; and whether the dispute involves expert or legal issues where a precedent is desirable.¹⁵⁴

The following chapter establishes the oceans management context for this study and assesses current arrangements in Australia for their capacity to incorporate integration and conflict management objectives in accordance with the framework of analysis set out in this chapter.

¹⁵⁴ Fels (1999).

PART II:

AUSTRALIA'S OCEANS & FISHERIES DEVELOPMENTS

CHAPTER 2: AUSTRALIA'S OCEANS POLICY AND REGIONAL MARINE PLANNING

Australia has adopted the concept of integrated management, as raised in the international context, for the management of its oceans in line with ecosystem-based management principles. This chapter explores the introduction of integration into domestic oceans policy and highlights some of the issues related to integrated management, including the need for conflict management processes to overcome the obstacles of implementation.

2.1 The introduction of integrated oceans management into Australia

The Law of the Sea Convention (LOSC) was opened for signature in December 1982. It provides a framework that *inter alia* addresses the protection of the global marine environment and national maritime rights and responsibilities.¹⁵⁵ The LOSC entered into force on 16 November 1994 and was the international driver for the development of *Australia's Oceans Policy* (AOP).¹⁵⁶ Australia ratified the LOSC on 3 October 1994, thus providing a basis to formally claim its vast maritime territory.¹⁵⁷ The LOSC enabled nations to claim exclusive economic zones (EEZs) to enhance nations' economic growth through the sovereign rights to exploit the resources in their EEZs.¹⁵⁸ However, these sovereign rights come with an obligation to demonstrate the effective management of those resources. This

¹⁵⁵ VanderZwaag, D., Davis, B., Haward, M. and Kriowken, L.K. (1996). "The Evolving Oceans Agenda: From Maritime Rights to Ecosystem Responsibilities." Introduction. In: Kriowken, L., Haward, M., VanderZwaag, D., Davis, B., *Oceans Law and Policy in the post-UNCED era: Australian and Canadian Perspectives*. London: Kluwer Law International: 1-9.

¹⁵⁶ Rothwell, D.R., (1996). "Australia and the Law of the Sea: Recent Developments and Post-UNCED Challenges." Chapter Four. In: Kriowken, L., Haward, M., VanderZwaag, D., Davis, B., *Oceans Law and Policy in the post-UNCED era: Australian and Canadian Perspectives*. London: Kluwer Law International: 59-74.

¹⁵⁷ Eadie, E.N. (2001). "Evaluation of *Australia's Oceans Policy* as an example of public policy-making in Australia." *Maritime Studies*, 120: 1-13; and Vince, J. (2003). "The Development of *Australia's Oceans Policy*: Institutions and the 'Oceans Policy Community'". Paper presented at the Australasian Political Studies Association Conference, Hobart, Australia. 29 September – 1 October 2003.

¹⁵⁸ Alder, J. and Ward, T. (2001). "*Australia's Oceans Policy*: Sink or Swim?" *Journal of Environment & Development*, 10 (3): 266-289; and Lee, D. (2003). "Australia's Fishing Future – A non-government view." *Maritime Studies*, 130: 18-22.

requirement is designed to discourage nations from declaring EEZs to stop other nations from utilising the resources in that area for economic benefit. When Australia formally declared its EEZ in 1994, a period of intense lobbying by Australian scientists and the maritime industry began.¹⁵⁹ This lobbying prompted the Commonwealth Government to consider an integrated and ecosystem-based policy for the planning and future management of Australia's maritime regions that would meet the requirements of the LOSC and also provide a framework for ecologically sustainable development (ESD) in Australia's EEZ.¹⁶⁰

Ecologically sustainable development (ESD) underpins Australia's efforts towards achieving integrated management across the land and sea interface, thereby providing the basis for compromise between the conflicting interests of development and conservation.¹⁶¹ The definition of ESD in Australia is encapsulated in Australia's *National Strategy for Ecologically Sustainable Development (1992)*:

using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.¹⁶²

The Australian *National Strategy for ESD* (the Strategy) sets out the broad strategic and policy framework under which governments will cooperatively make decisions and take actions to pursue ESD in Australia, based on ecosystem health and intergenerational equity. The Strategy is unique in its identification of inter-sectoral issues that must be collectively addressed by governments to achieve ESD, as intended in the aims of the Strategy. As such, it provides the broad framework, or 'blueprint', for cross-sectoral and cross-jurisdictional integrated management as encapsulated by AOP. In addition, reflecting these international initiatives, Australian governments in general are progressing towards a triple bottom line of ecological, social and economic sustainability in natural resource management.¹⁶³

¹⁵⁹ Eadie (2001).

¹⁶⁰ Alder and Ward (2001).

¹⁶¹ Eadie (2001).

¹⁶² Department of Environment and Heritage. (1992). "National Strategy for Ecologically Sustainable Development." <http://www.deh.gov.au/esd/national/nsesd/strategy/> [Access date: 5 February 2004].

¹⁶³ Potts, T. (2004). "Triple Bottom Line Reporting – A tool for measuring, communicating, and facilitating change in local governments." A paper presented at the Effective Sustainability Education Conference. NSW: Sydney.

2.2 The development of *Australia's Oceans Policy*

On 8 December 1995, the Australian Prime Minister, Paul Keating, announced plans to develop an “integrated oceans strategy” that would “assist in dealing with problems in the marine environment, taking the opportunities offered by our marine areas, and meeting our obligations under the United Nations Convention on the Law of the Sea for our Exclusive Economic Zone”.¹⁶⁴ ‘Integrated’ in this context refers to the active engagement of all three spheres of government and the full range of stakeholders.¹⁶⁵ This initiative for developing an integrated strategy to deal with problems or conflicts in the ocean environment was further accentuated in the 1996 elections, which highlighted bipartisan support for drafting a national oceans policy.¹⁶⁶ The concept of integrated oceans management was, and still is, innovative. Without set precedents, the Commonwealth decided to pursue the ‘safer’ option of a national policy, rather than legislation, to avoid having to deal with the issue of the OCS 3nm limit and to provide some leverage for implementation methods.¹⁶⁷ The conservation sector still argues that legislation is required to enforce the goals of AOP and the National Oceans Office (NOO) is currently reviewing this option.¹⁶⁸

On 2 March 1996 the Liberal Government was elected and on 3 March 1997 the Prime Minister, John Howard, announced plans to develop *Australia's Oceans Policy* (AOP) designed to maintain Australia's sovereign rights and to ensure the ESD of the marine environment.¹⁶⁹ Problems encountered during the development of AOP reflected the sectoral-based management and bureaucratic control that had governed activities in the past. The historical friction between Commonwealth, state and local governments was also a major hurdle for AOP to overcome, a hurdle that is yet to be satisfactorily overcome.

Public consultation featured highly in the development of the Oceans Policy, with a consultation paper on *Australia's Oceans Policy* released by the Prime Minister for public comment in April 1997.¹⁷⁰ Environment Australia (now the Department of the Environment and Heritage), having responsibility for the development of AOP, commissioned a series of

¹⁶⁴ Bergin, A. and Haward, M. (1999). “Current Legal Developments: Australia.” *The International Journal of Marine and Coastal Law*, 14: 387-398.

¹⁶⁵ Alder and Ward (2001).

¹⁶⁶ Eadie (2001).

¹⁶⁷ Vince (2003). “The Development of *Australia's Oceans Policy*...”; and Vince, J. (2003). “Australia's Oceans Policy: Five Years of Integration Across Sectors and Jurisdictions?” *Maritime Studies*, Nov-Dec 2003: 1-13.

¹⁶⁸ Ayre, M. (2004). NOO: Personal communication – 8 January 2004.

¹⁶⁹ Bergin and Haward (1999).

Wescott, G. (2000). “The development and initial implementation of Australia's ‘integrated and comprehensive’ Oceans Policy.” *Ocean & Coastal Management*, 43: 853-878.

¹⁷⁰ Ibid.

Issues and Background papers in 1997 to prompt discussions on oceans policy within the community and government agencies.¹⁷¹ In December 1997, a two-day Ocean Forum sponsored by Government, was held to gain input from stakeholder groups, academia, the scientific community, as well as government on the development issues relating to AOP. Despite the best intentions to include wide group diversity in discussions, most of the 133 delegates that attended the Ocean Forum were Commonwealth and state bureaucrats.¹⁷² During this period, the Marine and Coastal Community Network (MCCN) also became a significant player in the distribution and collection of information from the community regarding the Oceans Policy. It was an unusual step for Government to designate part of the consultation process to an NGO, which illustrated the Government's desire to move to a more 'bottom-up' approach to oceans management.¹⁷³

The Ministerial Advisory Group on Oceans Policy (MAGOP) was established in September 1997 and consisted of eighteen members representing various key interest groups, to advise the Minister for the Environment on issues relating to the development of AOP from a non-government perspective.¹⁷⁴ The following year, the MAGOP released a comprehensive report of its recommendations, which were based on a regional ocean planning and management approach.¹⁷⁵ These recommendations laid the early foundations for the development of Regional Marine Plans (RMP) that were designed to apply the principles of oceans policy to practical management on a regional basis. The MAGOP report highlighted the importance of incorporating ESD principles in AOP, the application of multiple-use areas and recommended the use of ecosystem-based management techniques.¹⁷⁶ The MAGOP also identified the conflict over institutional arrangements between the industry representatives, who believed current arrangements were suitable, and the conservationists, who believed that the current arrangements were fragmented and required integration. As a result, the MAGOP suggested three management options, none of which were adopted:

- a Commonwealth-State Ministerial Council advised by Working Groups and NGO Reference Groups;
- a statutory National Oceans Commission reporting to a Ministerial Council; and
- a Coordinating Council reporting to a Ministerial Council.¹⁷⁷

¹⁷¹ Vince, J. (2003). "Australia's Oceans Policy:..."

¹⁷² Wescott (2000).

¹⁷³ Vince, J. (2003). "Australia's Oceans Policy:..."

¹⁷⁴ Bergin and Haward (1999); Vince (2003). "Australia's Oceans Policy:..."; and Wescott (2000).

¹⁷⁵ Bergin and Haward (1999).

¹⁷⁶ Wescott (2000).

¹⁷⁷ Ibid.

Up until early 1998, the Commonwealth had been working closely with the states and territories (herein referred to as 'the states') in the development of AOP. However, due to the excessively prolonged agreement period by the states as a result of the unwillingness of the Commonwealth Environment Minister to concede to the states' demands of inclusivity in the decision-making body and for financial assistance to implement the policy, the Commonwealth vetoed the possibility of a national oceans policy in favour of a Commonwealth oceans policy released in December 1998, the International Year of the Oceans.¹⁷⁸ This political move contributed greatly to the historical friction between Commonwealth and state governments and undermined several years of negotiations and confidence building. It is only now that the Commonwealth Government, through regional marine planning and the Integrated Oceans Management (IOM) Initiative, is beginning to rebuild the trust of the states. To this end, a Memorandum of Understanding (MoU) has been signed by Queensland and the Northern Territory to collaborate in the scoping phase of the Northern Regional Marine Plan.¹⁷⁹

Australia's Oceans Policy was released in two volumes on 23 December 1998, with a \$A50m budget for implementation over three years. Volume One of AOP establishes the framework for integrated and ecosystem-based planning and management for all of Australia's marine jurisdictions. AOP's vision for Australia's oceans is for:

Healthy oceans: cared for, understood and used wisely for the benefit of all, now and in the future.¹⁸⁰

It also included a series of nine goals and principles, institutional arrangements and policy guidance towards a national oceans policy. Volume Two of AOP details the specific sectoral measures or challenges posed by integrated oceans planning and management in achieving ESD, and proposes over 400 responses to these challenges in some twenty areas of oceans management.¹⁸¹ A test of the success of AOP will be if regional marine planning can achieve harmonious development between sectors and across jurisdictions, whilst avoiding any serious cumulative environmental impacts.¹⁸² In other words, a measure of AOP success will be if it can achieve ESD on a national level.

¹⁷⁸ Foster, E.G. and Haward, M. (2003). "Integrated Management Councils. A Conceptual Model for Ocean Policy Conflict Management in Australia." *Ocean & Coastal Management*, 46: 547-563.

¹⁷⁹ Gleeson, M. (2002). AFFA: Personal communication. February 2002.

¹⁸⁰ Commonwealth of Australia. (1998). "Australia's Oceans Policy." Canberra: Environment Australia.

¹⁸¹ Ibid.

¹⁸² Eadie (2001).

2.2.1 *Australia's integrated oceans management institutional arrangements*

The success of AOP and integrated oceans management in general is largely dependent on the effectiveness of institutional arrangements established to achieve coordination and cooperation between governments and their respective departments. Overall government commitment to an integrated and comprehensive oceans policy, however, is unlikely to wane due to Australia's assertion of its sovereign rights and consequent obligations under the LOSC.¹⁸³

The Commonwealth institutional arrangements for implementing integrated oceans management, including the implementation of AOP and regional marine planning, are (see Figure 1):

- the Sustainable Environment Committee (SEC) of Cabinet – to provide a whole of government framework on issues of environmental sustainability;
- the Natural Resource Management Ministerial Council (NRMMC)¹⁸⁴, supported by the Natural Resource Management Standing Committee (NRMSC) – to coordinate cross-jurisdictional issues;
- the Integrated Oceans Management Working Group (IOMWG) of the NRMMC's Marine and Coastal Committee (MACC) – for states and the Commonwealth to collaborate and develop a national approach to IOM;
- a National Oceans Ministerial Board (NOMB or 'the Board') – designed to drive the cross-sectoral implementation issues of AOP and includes Commonwealth Ministers for Environment and Heritage (chair); Science; Industry, Tourism and Resources; Transport and Regional Services; and Fisheries, Forestry and Conservation¹⁸⁵;
- an Oceans Board of Management (OBOM) – consisting of the Secretaries of the five Commonwealth Board agencies, established to ensure a whole-of-government approach to AOP and to oversee the development, management and implementation of the NOO 3-year work plan;
- the Board Agency of Senior Officials (BASO) – consisting of the senior officials from the five Board agencies, including the Department of Environment and Heritage (DEH), Department of Transport and Regional Services (DOTARS), Department of Agriculture, Fisheries and Forestry (DAFF), Department of Industry, Tourism and Resources (DITR) and Department of Education, Science and Training (DEST), designed to work with the NOO and the BAOO to give advice to the OBOM on the development of AOP;

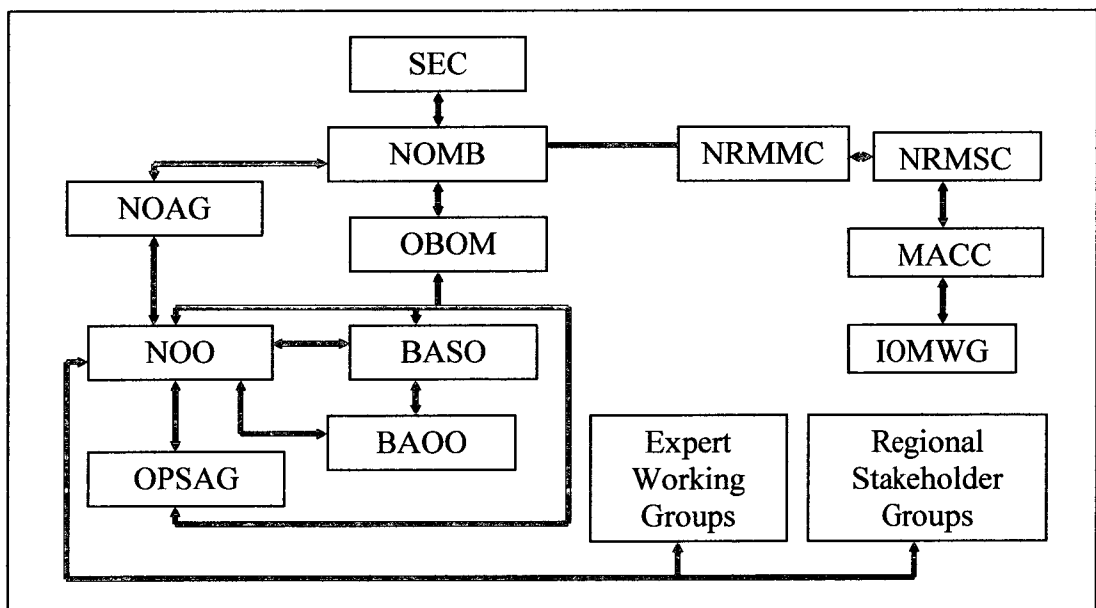
¹⁸³ Eadie (2001).

¹⁸⁴ The NRMMC took over the Australian and New Zealand Environment and Conservation Council's (ANZECC's) role when it disbanded in 2002.

¹⁸⁵ Vince (2003). "Australia's Oceans Policy:..."

- the Board Agency of Operational Officials (BAOO) – consisting of operational officials of the five Board agencies, created to work with the NOO and the BASO to support the OBOM;
- a National Oceans Advisory Group (NOAG) – replaced the MAGOP, comprising non-government representatives selected by the NOMB for their expertise in oceans issues relating to sectoral interests and formed as a consultative mechanism to aid the Board in implementation and development;
- an Oceans Policy Science Advisory Group (OPSAG) – formed to give unfettered scientific advice to senior level science officials in the NOMB through the OBOM;
- a National Oceans Office (NOO) – initially part of the Department of Environment, now an independent, prescribed executive agency formed under the *Public Service Act 1999*, designed to implement AOP and coordinate and develop RMPs; and
- Expert Working Groups and Regional Stakeholder Groups – comprising key non-government and government experts and stakeholders in each region to advise on the RMP process.¹⁸⁶

Figure 1 Commonwealth Integrated Oceans Management institutional arrangements



¹⁸⁶ Bergin and Haward (1999); and Commonwealth of Australia. (2003). "Oceans Policy: Principles and Processes." Hobart: National Oceans Office: 9.

2.2.2 Australia's Oceans Policy commitment for fisheries

Australia's Oceans Policy identifies a number of challenges faced by Government in the effective management of ecologically sustainable fisheries in Australia. These challenges have been identified in the *AOP Specific Sectoral Measures* document¹⁸⁷, which also identifies the Commonwealth's response to these challenges that will be implemented through regional marine planning. The first challenge is "to ensure ecologically sustainable fisheries that contribute to the social, cultural, environmental and economic well-being of Australians".¹⁸⁸

The Commonwealth (the Government) response to this challenge has been addressed in terms of its commitment under several different programs. In fisheries management, the Government committed to:

- carry out a comprehensive review of fisheries laws and regulations in order to streamline processes and reduce compliance costs through the Competition Policy Review;
- continue the existing cost recovery regime and not impose a resource rent on the industry;
- undertake strategic environmental impact assessments of all new Commonwealth fisheries management plans and for all those without management plans within five-years, in line with the requirements of the EPBC Act;
- improve stakeholder involvement in management arrangements;
- review existing and finalise remaining OCS arrangements for offshore fisheries;
- continue to seek greater consistency in fisheries management across jurisdictions;
- use RMPs to resolve resource allocation issues between commercial, recreational and charter fisheries; and
- improve the science base for management and development of marine resources.¹⁸⁹

In terms of meeting the challenge of ecologically sustainable fisheries practices, AOP commits the Government to:

- finalise and implement the Commonwealth Fisheries Bycatch Policy and a National Fisheries Bycatch Policy;
- develop and implement fisheries-specific actions, including Bycatch Action Plans (BAPs), into fisheries management arrangements;

¹⁸⁷ Commonwealth of Australia (1998) "Australia's Oceans Policy."

¹⁸⁸ Ibid: 9.

¹⁸⁹ Ibid: 10.

- provide \$700,000 to establish a network of fisheries extension officers, through SeaNet, to promote environmentally sound fishing practices;
- continue to implement the Recovery and Threat Abatement Plans for endangered species;
- continue to lead international efforts and cooperate with Regional Fisheries Management Organisations (RFMOs) to reduce seabird bycatch in fishing operations;
- develop and implement policies for the ESD of new fisheries, including pre-commercial and experimental fisheries;
- continue to develop performance and operational sustainability indicators taking into account broad ESD objectives;
- continue to implement monitoring programs to ensure fisheries achieve long-term sustainability;
- ensure domestic management arrangements are in line with international obligations to effectively manage marine living resources; and
- minimise the translocation of harmful marine pests.¹⁹⁰

To promote stewardship of the oceans and its fisheries resources, the Government committed to continuing efforts to develop codes of responsible fishing behaviour and fostering community involvement in activities that promote stewardship.¹⁹¹ With a view to improving the sustainability and efficiency of fisheries, the Government committed to continuing its review of existing and potential economic and regulatory instruments.¹⁹²

It is recognised that in meeting some of the requirements of AOP, some fisheries will require a form of structural adjustment and to this end, the Government committed to:

- carry out an industry development program in the southern shark fishery to make the industry more viable, while protecting the environment;
- remove excess capacity in fisheries;
- continue to pursue self-funded adjustment strategies through economic incentives;
- develop an industry-government working group to discuss options for an industry development program for the southeast non-trawl fishery; and
- continue to participate in international forums, such as FAO and APEC, in an effort to reduce excess global fishing capacity.¹⁹³

¹⁹⁰ Commonwealth of Australia (1998) "Australia's Oceans Policy": 10.

¹⁹¹ Ibid.

¹⁹² Ibid.

¹⁹³ Ibid: 11.

The Government recognised that recreational, charter and commercial fisheries often compete for the same resources and that management should be integrated to reflect this fact.¹⁹⁴ Therefore, the specific sectoral measures the Government committed to included:

- contributing \$1.8million to a National Recreational Fishing Survey;
- appointing a game fishers' representative to the Eastern Tuna and Billfish MAC;
- the development and implementation of a nationally consistent approach to recreational and charter fishing;
- continuing to ensure recreational fishing is ecologically sustainable; and
- continuing to involve recreational fisheries in consultative committee processes where appropriate.¹⁹⁵

The Government committed to industry action through an ongoing commitment to:

- identify and implement cost-cutting strategies for industry and to encourage innovation and environmental responsibility;
- increase trade and investment opportunities for industry;
- remove unnecessary regulatory burden and minimise transaction costs to resource users; and
- encourage the adoption of quality assurance and value-adding strategies through the SeaQual program.¹⁹⁶

The Oceans Policy recognised that effective fisheries and oceans management could not be implemented without improvements to the current scientific knowledge base.¹⁹⁷ The Government, in recognising the need for improved science, committed to:

- enhancing the capacity to conduct stock assessments;
- collaborate with industry to undertake research and development to support management of new, ecologically sustainable fisheries; and
- support research into the impacts of fishing and methods to mitigate these impacts, the use of catch components that would otherwise remain unused and life cycle knowledge of economically important species.¹⁹⁸

The problem of illegal fishing in Australian waters is increasing as global demands on diminishing fish stocks increase. This is especially the case in Australia's sub-Antarctic

¹⁹⁴ Commonwealth of Australia (1998) "Australia's Oceans Policy": 25.

¹⁹⁵ Ibid: 11.

¹⁹⁶ Ibid: 11.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid.

waters where the valuable, yet diminishing Patagonian toothfish is targeted and to the north, where Indonesian vessels regularly encroach our waters. Through AOP, the Government's response to the rise in illegal fishing is to:

- increase the number of civil patrols in our sub-Antarctic waters;
- employ more fisheries officers to police our northern waters;
- amend the fisheries legislation to make surveillance and enforcement of foreign fishing more effective;
- continue to support the protection of fish stocks from illegal fishing through international forums such as the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the World Trade Organisation (WTO);
- continue to develop national and international strategies dealing with illegal fishing, non-compliance and enforcement issues;
- implement the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks (the Fish Stocks Agreement); and
- develop a cost-effective means of implementing Australia's responsibilities as a port and flag State.¹⁹⁹

Notwithstanding that the development of AOP was a major achievement, the extent to which the policy added value could be questioned given that the main initiatives addressed in Volume 2 of AOP, the *Specific Sectoral Measures*, were already being addressed and the principles encapsulated by the *National Strategy for Ecologically Sustainable Development* and integrated management were already core elements of government policies. The value of such a policy, however, is shown by the fact that the specific measures being, or to be pursued by the Commonwealth across ocean sectors are coordinated, or at least made explicit, in the one document highlighting how the Commonwealth is planning to operationalise the goals set out for AOP.

2.3 Regional Marine Plans

Regional marine planning is the primary mechanism for implementing the ecosystem-based principles of the Commonwealth's AOP.²⁰⁰ In May 1999 a two-day workshop was held in Canberra to determine the RMP framework.²⁰¹ The major topics discussed were the planning phases, public consultation procedures and the draft structure of the Preliminary Options Paper.

¹⁹⁹ Commonwealth of Australia (1998) "Australia's Oceans Policy": 11.

²⁰⁰ National Oceans Office. (2003). "Regional Marine Planning."
http://www.oceans.gov.au/regional_marine_plan_overview.jsp

²⁰¹ Wescott (2000).

The resulting RMP framework comprises four phases. These are: the scoping, or definition phase of the Plan; determining the economic, social, environmental and cultural characteristics of the region via assessments; developing potential options; and analysing those options in order to implement the Plan.²⁰² The scoping phase involves the definition of the regional boundaries and an overview of the environmental, economic, social and cultural interests in the region. The assessment phase then further defines these interests to improve our understanding of the unique characteristics of the region that should be protected or safeguarded for the future. There are six areas investigated in the assessment phase, namely:

1. the biological and physical characteristics important to the region;
2. the human uses within the region;
3. the impacts that can affect the natural system;
4. the community and cultural values of the region;
5. the indigenous uses and values; and
6. the management and institutional arrangements.²⁰³

The next phase is to develop options for management. This includes defining a list of alternative institutional arrangements that could be effectively used to implement the RMP. Finally, the selected option must be carefully implemented to ensure the objectives are being adequately met and that these act in accordance with the principles of AOP.

It was claimed that Regional Marine Plans would:

- “implement ecosystem-based management as the basis for decision-making and management and embed the principles of ecologically sustainable development, including precaution into all decision making processes;
- promote ecologically sustainable marine based industries that contribute to regional development;
- develop integrated management of sectoral activities and achieve strong efficient cross-sector linkages;
- work towards consistency in management across jurisdictional boundaries when impacting upon the same oceans resource or sector;
- lead to clearly defined and agreed Regional Marine Plan outcomes that are integrated across all sectors;
- lead to fair decision-making and conflict resolution regarding access to oceans resources within and between generations;

²⁰² National Oceans Office. (2001). “Regional assessments for the South-east Regional Marine Plan.” http://www.oceans.gov.au/reg_ass_intro.htm

²⁰³ Ibid.

- increase involvement of resource users and the community at large in planning and decision making;
- engender long term responsible use of oceans resources - stewardship;
- provide flexible management arrangements that focus on measurable outcomes coordinated across sectors;
- contribute to adaptive management based on monitoring and evaluation of outcomes of management against expected performance, including providing for auditing and review processes; and
- establish clear and agreed definitions of issues and terminology.”²⁰⁴

2.3.1 *The South-east Regional Marine Plan*

Internationally, the Large Marine Ecosystem (LME) concept focuses attention away from sectoral or jurisdictional management towards management of the marine ecosystem as a whole.²⁰⁵ LMEs as conceptualised by Hinds (1992), refer to ecosystems that are so large that they cross several jurisdictional boundaries, thus requiring international attention.²⁰⁶

Australia has adapted this concept to address its national obligations for the effective management of ecosystems within its EEZ (also termed LMEs, but on a national scale). The first region chosen for planning was the South-east Region (the Region), incorporating over two million square kilometres of Australia’s ocean waters off Victoria, Tasmania (including Macquarie Island), southern New South Wales and eastern South Australia (see Figure 2).²⁰⁷

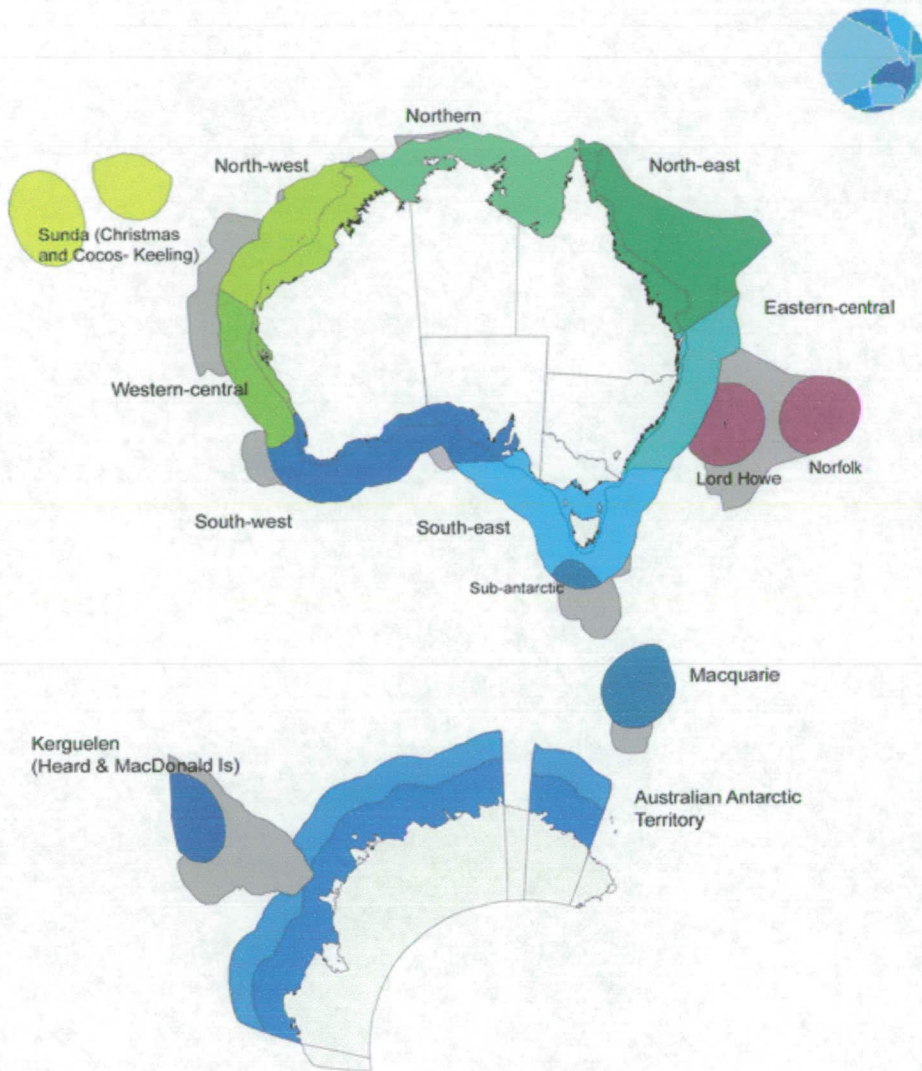
²⁰⁴ Environment Australia / National Oceans Office. (2002). “Environment Australia/National Oceans Office briefing on Marine Protected Areas in the South East Regional Marine Plan for the Commonwealth Marine Protected Areas Stakeholder Reference Group, the South East Regional Marine Plan Working Group, and the South East Regional Marine Plan Steering Committee.” Outcomes of meeting. Melbourne: 17 September 2002.

²⁰⁵ Hinds, L. (1992). “World marine fisheries. Management and development problems.” *Marine Policy*, 16 (5): 394-403.

²⁰⁶ Hinds (1992).

²⁰⁷ Eadie (2001); and
National Oceans Office. (2004). “South-east Regional Marine Plan – Implementing Australia’s Oceans Policy in the South-east Marine Region.” Hobart: National Oceans Office: vii.

Figure 2 Map of LMEs that will be the basis for regional marine planning in Australia – the light blue around South Australia, Victoria, Tasmania and NSW illustrates the SERMP area.



**Preliminary large marine domains regionalisation
(Modified from CSIRO 1998) and Marine Planning Regions**

Source: National Oceans Office website. (2003). http://www.oceans.gov.au/regional_l.jsp [Access date: 20 June 2004].

The process to develop the SERMP was launched at a two-day Oceans Forum in Hobart in April 2000. The SERMP, as the first RMP, is essentially the ‘blueprint’ for the regional marine planning process in Australia. The south-east is perceived to be one of the more complex maritime regions with the inclusion of four states and the Commonwealth in major sectors such as fisheries and oil and gas production.²⁰⁸ The SERMP has evolved over time. Initially, it was expected to be primarily a ‘plan’ that would identify gaps and direct future oceans related policy and management within the region. As the SERMP has developed, a

²⁰⁸ Bergin and Haward (1999).

focus on 'process' has emerged. The objective of the SERMP has evolved into the development of a framework for making management and policy decisions at the regional level, while identifying specific issues that need to be addressed in meeting the objectives of the SERMP. This reorientation from 'plan' to 'process' was, in part, a response to concerns expressed by Commonwealth agencies over progress in developing the SERMP.

In February 2003, the Minister for the Environment and Heritage, the Hon David Kemp noted that the Board agencies were not satisfied with the progress of the SERMP. Although agencies outside the National Oceans Office (NOO) were applying pressure to speed up the process, they were reluctant to engage in a process they felt isolated from. The process was therefore slowed down and a concentrated effort to effectively engage Commonwealth agencies was embarked upon. On 21 February 2003, a workshop was held by the NOO in Canberra with all Board agencies to discuss the way forward and to ensure agencies were satisfied with the SERMP agenda. The process was expected to produce three products in June/July 2003 that would adequately cover the concerns and hesitations of the Board agencies. These products were:

- a post budget assessment of the ongoing role of the NOO;
- a governance framework document highlighting implementation strategies; and
- an action plan, or strategy for the south-east, which was more program related.²⁰⁹

The draft SERMP was released on 18 July 2003, by the Chair of the NOMB and Minister for the Environment and Heritage, the Hon Dr David Kemp, with an *Oceans Policy: Principles and Processes* companion document outlining the Integrated Oceans Process for improving the cross-sectoral integration of oceans management, effectively defining the governance framework and implementation strategies for regional marine planning. The Integrated Oceans Process proposes a whole-of-government approach for decision-making with respect to marine issues that impact on more than one agency's area of responsibility.²¹⁰ It comprises three steps for issues assessment and strategy formulation:

1. Relevance Testing – scoping the issues to determine if there is a lack of clarity with respect to assigned agency responsibility, what management arrangements are required for a new use of the ocean, what new policies could impact the marine environment, the cross-jurisdictional/cross-sectoral implications of an issue, the potential interactions/conflicts associated with the issue and if there is a potential for high-risk impacts (that is, through cumulative impacts);

²⁰⁹ National Oceans Office. (2003). Canberra: DEH. Workshop - 21 February 2003.

²¹⁰ Commonwealth of Australia. (2003) "Oceans Policy...": 6-7.

2. Issue Scoping and Risk Analysis – identification of the lead agency and risk analysis of issues (to be guided by *Oceans Guidelines* – once developed); and
3. Strategy Development – assigning management strategies to deal with the issues effectively, using measurable objectives and indicators as well as the establishment of future integrated institutional arrangements.

While the NOO has worked hard at addressing the issues of concern raised by Board agencies in the February 2003 workshop, there remains a level of uncertainty about the NOO's long-term ongoing role, which continues to cause anxiety amongst those involved in the process.

The final SERMP was officially released by the Chair of the NOMB and Minister for the Environment and Heritage, the Hon Dr David Kemp, on 21 May 2004.²¹¹ The SERMP is the 'action plan' for implementing *Australia's Oceans Policy* in the South-east Marine Region. The SERMP includes nine regional objectives, which guided the development of the Plan and its 93 associated actions.²¹² In recognition of the SERMP being as yet unable to deliver on certain issues, a supplement to the SERMP will be produced in 12 months time. The SERMP Supplement will include details on:

- a complete system of marine protected areas (MPAs) within the Region (that is, a full assessment and identification of candidate areas within all 11 Broad Areas Of Interest, building on the two included in the SERMP)²¹³;
- progress on a performance assessment system to measure the progress of the actions outlined in the SERMP;
- progress on the integration of MPAs and other spatial closures, such as fisheries closures;
- tools and approaches for achieving multiple-use management (drawing from the Otways case-study) ; and
- an initial review of the progress on actions outlined in the SERMP.²¹⁴

The SERMP is broken down into sections that reflect AOP. Each section is then assigned corresponding regional objectives and sub-objectives that are to be addressed, with specific actions to address these objectives outlined in the action plan.

²¹¹ National Oceans Office (2004). "South-east Regional Marine Plan."

http://www.oceans.gov.au/se_implementation_plan.jsp [Access date: 20 June 2004].

²¹² National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": viii.

²¹³ See Section 2.5.2 below for explanation of the NRSMPAs.

²¹⁴ National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": xii.

The *Managing Uses* section, for example, refers to the management of human needs and uses within the Region. The objectives encompassed by this section are to:

- increase long-term security of access and certainty of process for existing and future marine-based industries; and
- promote economic development and job creation in the Region consistent with ecologically sustainable development.²¹⁵

The *Ecosystems* section reflects the interconnectivity of processes and functions of the marine environment. This section guides management towards ecosystem-based management through the establishment of a National Representative System of Marine Protected Areas (NRSMPAs) in the Region and the management of human impacts on the environment, consistent with the principles of ESD. The regional objectives associated with this section are to:

- protect, conserve and restore the Region's marine biodiversity, ecological processes, natural and cultural marine heritage;
- increase knowledge and understanding of the Region to improve our capacity to pursue ecologically sustainable development; and
- ensure that all ocean uses are ecologically sustainable.²¹⁶

The *Cooperative Management* section refers to the partnerships between governments, industry, the indigenous and wider community necessary for effective assessment, planning and management of oceans resources. This section also refers to the need for effective marine education tools, compliance and enforcement efforts and more targeted and coordinated scientific research and data management in the Region.

The objectives relating to the *Cooperative Management* section are to:

- enhance community and industry stewardship and understanding of the values and benefits of the Region and involve them in its management;
- take into account in decision making the needs, values and contributions of the community, industry, the national interest and international obligations relevant to the Region;

²¹⁵ National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": 45.

²¹⁶ Ibid: 49-53.

- integrate management of access, allocation, conservation and use of marine resources to ensure fairness and accountability to the community and all users; and
- involve indigenous communities in management of the Region in a manner that recognises and respects their rights, custodial responsibilities, contributions and knowledge.²¹⁷

Finally, the issues relating to the *Implementation and Review* of the SERMP and process are identified. Actions relating to adaptive management processes, which are an important component of regional marine planning that recognise our limited knowledge base and that management progresses with improvements in our understanding of the marine ecosystems and environment, risk-assessment and performance assessment, are included.²¹⁸

While the action plan²¹⁹ in the SERMP provides comprehensive aims and objectives for the Region with respect to integrated management, there are few tangible ‘actions’ to illustrate to the reader exactly how these objectives will be applied in practice. The action plan focuses on high-level objectives that will be further refined into operational objectives as appropriate institutional arrangements are implemented to address issues of integration and cross-sectoral and/or cross-jurisdictional coordination.

2.3.2 *The SERMP commitment for fisheries*

The SERMP action plan is arguably more vague operationally than the sectoral measures proposed in the AOP document. There are only a small number of actions in the SERMP that apply specifically to fisheries in the South-east Region, with the remainder of actions describing processes being carried out under other initiatives or contributing to integrated oceans management in general, rather than the anticipated focus on the needs of the Region. The actions that apply generally, but may have some impact on fisheries management include, but are not limited to:

- the establishment of a broad-scale resource sharing framework (Action 1.1.1);
- continuing to provide opportunities for industry innovation and to manage industry expansion, to achieve ecologically sustainable use of marine resources in the Region (Action 1.2.1);
- promoting and encouraging industry uptake of environment management systems in the Region (Action 1.4.1);

²¹⁷ National Oceans Office (2004) “South-east Regional Marine Plan – Implementing...”: 54-58.

²¹⁸ Ibid: 59.

²¹⁹ Ibid: 45-59.

- recognising and promoting existing best practice and innovation in marine-based industries through information sharing and communication tools (Action 1.4.2);
- developing tools and approaches for multiple-use management (initially through the Otways case-study) (Action 1.6.1);
- conducting a targeted regulatory efficiency review (Action 1.7.1);
- continuing to develop a representative system of MPAs in Commonwealth waters and enhancing coordination across jurisdictions (Actions 2.1-2.2);
- developing measures to assist industry meet conservation requirements across the Region (action 2.3.7);
- building links between management of offshore marine resources/ecosystems and estuaries in the Region by identifying ecosystem services provided by estuaries, including the economic value of estuarine habitats to key species (Action 2.8.1);
- developing and applying methods of multiple-use risk assessment for threats to the marine environment, industry and communities (Action 2.9.1);
- supporting mechanisms to minimise interactions between industry and protected species (Action 2.9.6);
- supporting awareness raising and capacity building initiatives for industry and the community (Action 3.2.1);
- reviewing the efficiency and effectiveness of existing stakeholder consultation mechanisms (Action 3.2.2);
- supporting industry-led research, education and participation initiatives in the Region (Action 3.4.1);
- communicating marine industry and community contribution to marine research in the Region (Action 3.4.2);
- incorporating risk-based decision making and management strategy evaluation into decision making processes (Action 4.2.1); and
- assessing the cumulative, social, economic and ecological impacts of multiple uses to determine priority areas for research and management (Action 4.2.3).²²⁰

Other actions described in the SERMP apply specifically to fisheries, but remain vague in detail. These actions are expected to be applied across all the regions, with responses differing according to the circumstances in which they are applied. These actions are:

- the establishment of an agreed framework for fisheries resource sharing and management between sectors (commercial, recreational, indigenous and aquaculture) that use Commonwealth managed fisheries (Action 1.1.2);

²²⁰ National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": 45-59.

- to encourage and promote value-adding in the fishing industry in the Region (Action 1.2.2);
- to support scoping studies of economic issues facing commercial fisheries in the Region (Action 1.3.1);
- to continue to assess Commonwealth fisheries performance in the Region using ABARE industry surveys and BRS Fishery Status Reports (Action 1.3.3);
- to implement the “Displaced Fishing and Marine Protected Areas” policy framework (Action 1.5.2);
- to continue to promote and support improved communications between the petroleum industry and the commercial fishing sector with regard to seismic surveys and with other sectors more broadly (Action 1.6.2);
- to investigate ways and efficiencies in integrating fisheries spatial management and MPAs or other spatial management in other sectors in the Region (Action 2.3.3-2.3.4);
- to continue to conduct sectorally focused risk assessments – that is, strategic assessments under the EPBC Act (Action 2.9.2);
- to support further research and development for the design and use of mitigation methods to avoid seal interactions in the fishing industry (Action 2.9.5); and
- to examine the means for establishing regional structures and promoting indigenous participation in commercial fisheries and aquaculture (Actions 3.11.1 and 3.11.3).²²¹

There are, however, some specific actions directed at the Southern Region Fisheries. These actions are:

- to pursue complementary ecosystem-based fisheries management arrangements for fisheries resources, extending across the South-east Region, including consideration of OCS arrangements (Action 1.8.1);
- to use ecological risk assessment of Commonwealth fisheries in the Region to determine priority research and management areas (Action 2.9.3); and
- to investigate the use of management strategy evaluation for all sectors – but in the first instance, in the Southern and Eastern Scalefish and Shark (SESS) Fishery (Action 4.2.2).²²²

²²¹ National Oceans Office (2004) “South-east Regional Marine Plan – Implementing...”: 45-59.

²²² Ibid.

In light of the relatively non-specific nature of these 'actions', it would be arguably more accurate to refer to this action plan as an agenda setting exercise, to which specific action responses will be developed as it is applied in the Region. Some of the more refined action responses and assessment systems will be released in the SERMP Supplement, however, the action plan as it stands is non-committal and provides little guidance as to what regional marine planning will mean for industries and the environment.

2.3.3 Marine Protected Areas

Marine Protected Areas (MPAs) can incorporate ecosystem-based management, the precautionary approach to planning and management, adaptive management and a framework for conflict management if appropriately implemented.²²³ Where specific emphasis is placed in any MPA depends on the circumstances for which they were created. The criteria under which MPAs are designated range from scientific or ecological criteria to pragmatic and qualitative criteria and more recently, for socioeconomic, and representative area criteria.²²⁴ MPAs can serve as insurance against fisheries management mistakes, to protect biodiversity and regions for non-consumptive uses, to protect vulnerable species and habitats or for the management of conflicting uses.²²⁵ For example, the Cod Grounds Marine Reserve is being established off the coast of Laurieton, NSW, to protect the critically endangered grey nurse shark.²²⁶ Whereas, the Murray and Zeehan MPAs, being developed as part of the SERMP, are for the protection of more general conservation values identified through the National Representative System of MPAs.

MPAs can be used in the integrated oceans management framework for effective conflict management between resource users and in fisheries management to maintain fish stocks and their habitats.²²⁷ Whilst ecosystem-based fisheries management issues can be addressed through management plans, MPAs provide an efficient and effective way to simultaneously achieve both fisheries management objectives and the broader objectives of integrated oceans management. Quite often, in meeting the objectives of one purpose, MPAs have unintended consequences or impacts. For example, a MPA established for conservation purposes can have an unintentional impact on the profitability of a given fishery.

²²³ Agardy, M.T. (1994). "Advances in marine conservation: the role of marine protected areas." *Trends in Ecology and Evolution*, 9 (7): 267-270.

²²⁴ McNeill, S.E. (1994). "The selection and design of marine protected areas: Australia as a case study." *Biodiversity and Conservation*, 3: 586-605.

²²⁵ Ward, T.J., Heinemann, D. and Evans, N. (2001). "The role of marine reserves as fisheries managements tools." Canberra: BRS (AFFA): 23, 26.

²²⁶ Department of the Environment and Heritage. (2004). "Cod Grounds Marine Reserve proposal." <http://www.deh.gov.au/coasts/mpa/cod-grounds/#proposal> [Access date: 24 January 2005].

²²⁷ Ward, T. and Hegerl, E. (2003). "Marine Protected Areas in Ecosystem-Based Management of Fisheries." A report prepared for the Department of the Environment and Heritage for discussion at the World Parks Congress, Durban, South Africa. September 2003.

For MPAs to be successful in achieving their objectives, they must be implemented with sufficient monitoring and enforcement budgets, strategies and personnel to ensure they are effective and do not simply remain 'paper parks'.²²⁸ Recent studies have also focused on the need for complementary management outside the MPAs to ensure the success of the MPA in meeting its ecosystem objectives. MPAs established in the context of RMPs, have the potential to achieve this complementarity. It is also important that stakeholders can see the positive effects of MPA implementation through ongoing monitoring and objectives-based assessment.²²⁹

The IUCN General Assembly identifies the two separate, but inextricably linked, roles of MPAs as being for ecosystem-based management and for the provision of 'no-take' reserves, free from human impact.²³⁰ In Australia, much confusion as to the objectives and hence, the effects, of MPAs has stemmed from the variation in terminology used between states and between states and the Commonwealth.²³¹ A Marine Park in one state may indicate a complete no-take area designed to protect a specific species, while in another state it may represent an area managed for multiple uses to meet an overall ecological conservation objective. This confusion can lead to compliance issues through misinterpretation of terminology²³² and a lack of trust in the process of designation if stakeholders have raised expectations of the level of protection that would be offered by a MPA.

The concept of 'representative' MPAs were introduced in Australia in the early 1980s. The development of a 3-tiered habitat classification scheme was intended to take over the *ad hoc* method of MPA designation experienced in the past.²³³ This approach identifies geographic, substratum and biotic characteristics and consequently creates a profile of areas appropriate for representative protection. The habitat classification scheme was, however, limited by the vastness of the oceanic environment, with a majority of funds going towards the protection of well-studied areas, vulnerable species and habitat protection. Political and competing economic interests also inhibited effective implementation of this scheme. In 1988, the World Conservation Union (IUCN) General Assembly called on nations to protect and

²²⁸ Jameson, S.C., Tupper, M.H. and Ridley, J.M. (2002). "The three screen doors: can marine "protected" areas be effective?" *Marine Pollution Bulletin*, 44: 1177-1183; and Sanchirico, J.N. (2000). "Marine Protected Areas as Fishery Policy: A Discussion of the Potential Costs and Benefits." USA: Resources for the Future. Discussion Paper 00 23.

²²⁹ Sumaila, U.R., Guenette, S., Alder, J. and Cheunpagadee, R. (2000). "Addressing ecosystem effects of fishing using marine protected areas." *ICES Journal of Marine Science*, 57: 752-760.

²³⁰ Kenchington, R., Ward, T. and Hegerl, E. (2003). "The Benefits of Marine Protected Areas." Paper prepared for DEH. 28 July 2003: 3.

²³¹ McNeill (1994).

²³² That is, a Marine Reserve can be a no-take area in one jurisdiction and a multiple-use area in an adjacent jurisdiction that may allow for the sustainable use of resources. If there is no consistency, or if the user is unaware of the variance across boundaries, this can lead to compliance issues.

²³³ McNeill (1994).

restore marine heritage through the creation of a global, representative system of MPAs and complementary management.²³⁴ In light of this international proposal, the National Representative System of Marine Protected Areas (NRSMPAs) was declared in Australia, bringing representative areas to the forefront of MPA designation once again.

2.3.3.1 *Commonwealth MPAs in the SERMP area*

Although legislatively under the auspices of the EPBC Act, the political commitment for furthering Commonwealth MPAs towards a National Representative System of Marine Protected Areas (NRSMPAs) lies with regional marine planning, led by the NOO and under the guidance of the NOMB, making it a whole-of-government commitment. Under the NRSMPA initiative, the Commonwealth Government is committed to develop a Comprehensive, Adequate and Representative (CAR) system of MPAs to primarily protect biodiversity and ensure the long-term viability of marine and estuarine systems.

The Commonwealth MPA process has been affected by a number of uncertainties since its inception. Researchers identified the need for regionalisation early on in the regional marine planning process, but the Minister had other priorities for the NOO.²³⁵ What researchers saw as a two-year project was rushed through in about six months.²³⁶ This ‘quick fix’ is, arguably, nothing more than a response to political pressure, as the only tangible outcome of the SERMP, leading up to an election.

Step one in the development of a CAR system of MPAs in the south-east involved the selection of Broad Areas of Interest (BAOI) based on biological and other scientific information. Eleven BAOI were identified in the south-east, which included a sample of the full range of bioregions in the Region, large enough to adequately protect the whole biophysical feature or place that the area aimed to protect, including areas of important conservation value.²³⁷

‘BAOI’ was a concept introduced by the NOO and agreed by the DEH to give stakeholders some certainty about where these MPAs *would not* be. Stakeholders, however, became more anxious, as some of the BAOI covered areas of economic interest to them and there was a great deal of uncertainty in the way the DEH was handling MPA discussions.²³⁸ Uncertainty stemmed from the initial determination that there would be 11 candidate areas identified in

²³⁴ Commonwealth of Australia. (2003). “The Benefits of Marine Protected Areas.” Canberra DEH: 4.

²³⁵ From interview with subject IN54.

²³⁶ Ibid.

²³⁷ Environment Australia / National Oceans Office (2002).

²³⁸ From interview with subject MD21.

the South-east Region, one in each of the 11 BAOI.²³⁹ This created a lot of conflict over the timing of such designations, given that proper assessment of all 11 candidate sites within two years was unrealistic. With this type of commitment, it was also unlikely that states would continue any support for RMP, a loss that would be detrimental to the process at that stage.²⁴⁰ The process has, however, evolved. This, together with pressure from industry and further research into candidate areas, has meant that it was not necessary to identify a candidate area in each of the BAOI in the original SERMP. Only two have been included in the SERMP. The further nine areas will be assessed for their representativeness, in accordance with the ten MPA specifications, and incorporated in the SERMP Supplement due for release in 2005.

A review of the international literature indicates that the fishing industry in general holds deep-seated and negative views over MPAs. The industry feels that they often bear the cost of policy that will not necessarily provide any benefit to them.²⁴¹ In recent times, fishing interests have recognised potential benefits for the industry from MPAs. This support, however, has often waned when the declaration of MPA impacts on favourite fishing grounds.²⁴² Some industry representatives argue that RMPs are being used as vehicles for MPAs and for the DEH to become active participants in fisheries management processes and as such, refuse to show support for RMPs.²⁴³ There continues to be strong opposition by some within the fishing industry over MPAs, despite the effort and investment that has already gone into the consultation process.²⁴⁴ This is primarily because these fishers feel they continually bear the cost of government decisions, in terms of access and financial burden on the industry. Fishers may also view MPAs as merely another way of managing already sustainable fisheries, rather than for the protection of ecosystem health.²⁴⁵

As with many areas of public policy the problem faced by MPAs is that their benefits are slow to realise while the costs, or loss of income to key stakeholders are immediate, impacting on fishermen's livelihoods that may not be able to survive the short-term reductions in income.²⁴⁶ Until scientists can be more confident in their predictions of the benefits of MPAs and managers more confident that adequate compliance and enforcement

²³⁹ From interview with subject NT49.

²⁴⁰ Ibid.

²⁴¹ Jusseit, H. and Robinson, E. (2003). "Eastern Tuna & Billfish Fishery Industry Code of Practice for Responsible Fishing." Queensland: East Coast Tuna Boat Owners Association Inc (ECTBOA); and Bohnsack, J.A. (1993). "Marine Reserves: they enhance fisheries, reduce conflicts, and protect resources." *Oceanus*, 36(3): 63-67.

²⁴² Environment Australia / National Oceans Office (2002).

²⁴³ From interviews with subject EY71 and NT49.

²⁴⁴ From interview with subject MD21.

²⁴⁵ Ibid.

²⁴⁶ Jusseit and Robinson (2003).

can be implemented to realise these benefits, there will remain much resistance as to the true value of MPAs, especially of 'representative' areas competing with commercial production areas. There is clearly still a need for rethinking or for more education into what the process is about – why it is necessary and how it will impact industry if it is to go ahead successfully?

2.4 Integration in Commonwealth oceans management

2.4.1 *Cross-sectoral arrangements in oceans management*

Cross-sectoral integration has been achieved at the Cabinet level through the Sustainable Environment Committee (SEC). The SEC was established to fulfil an election promise to provide a whole-of-government framework on issues of environmental sustainability. The SEC comprises the Prime Minister (as Chair) and Ministers from the portfolios of Transport and Regional Services; Environment and Heritage; Agriculture, Fisheries and Forestry; Education, Science and Training; Industry, Tourism and Resources; and Fisheries, Forestry and Conservation.²⁴⁷ Matters considered by the Committee include greenhouse policy, the National Action Plan for Salinity and Water Quality, land clearing, bio-diversity and oceans policy.²⁴⁸ This body, however, only deals with high-level policy decisions and the more operational aspects of integration fall on other designated bodies or departments down the hierarchical chain.

Australia has no legislative basis for integrated cross-sectoral management of its marine industries. However, the Commonwealth of Australia has committed itself to cross-sectoral integrated oceans management through the establishment of the NOMB, which is responsible for decision-making and the implementation of AOP. The composition of the NOMB means that it is well placed to deal with cross-sectoral integration issues at the Ministerial level. Ministers outside the NOMB may be called on to participate in certain decision-making processes that are relevant to their portfolios, however, in practice this option has rarely been put into use. The limitation of the NOMB is that there are no state ministers involved. To adequately meet all aspects of integrated oceans management, which crosses administrative jurisdictional boundaries, it is imperative that state ministers are included in the decision-making processes.

²⁴⁷ National Oceans Office. (2004). "Australia's Oceans Policy Institutional Structures." DRAFT paper in preparation.

²⁴⁸ Commonwealth Government. (2003). "Sustainable Environment Committee." The Commonwealth Government On-line Directory. <http://www.gold.gov.au>.

The establishment of the OBOM was a positive outcome of the Norton Review of Oceans Policy implementation, contributing towards cross-sectoral integration.²⁴⁹ The OBOM is a very useful body in terms of filtering out important information that is to go to the NOMB for decision-making. It allows the NOMB to focus on the task of reaching agreeable outcomes that are based on a whole-of-government approach. While the OBOM has been a successful body, it lacks any state representation and hence cannot adequately deal with any potential integration issues or conflicts that cross jurisdictions. Although, on advice from the BASO and the BAOO, the OBOM may be better positioned to predict these issues than the NOMB. The BASO and BAOO work to the OBOM, which in turn reports to the NOMB, in a hierarchical chain of command. This gives rise to the question of whether, by the time specific regional groups are also added, there are too many layers in the bureaucracy, which can lead to a break down in the efficiency and effectiveness of the overall system down the track. This is something the NOO, in coordinating the process, will need to be wary of.

To ensure a Commonwealth approach to oceans planning and management, the Oceans Policy Inter-Departmental Committee (OPIDC) was initiated for input via the NOO. The OPIDC consists of operational level representatives from Commonwealth portfolios beyond and inclusive of the five Board agency portfolios. This body acts to inform other agencies on oceans planning and management issues, rather than to get 'sign-off' on specific issues, to ensure that a whole of Commonwealth Government approach is maintained. This body is limited in its cross-sectoral capacity by a lack of decision-making authority but can act as a strong advisory body for the NOO in relation to issues that may impact other agencies and sectors beyond the scope of the five Board agencies.

Regional marine planning has certainly enhanced the cross-sectoral integration capacity of the Commonwealth Government. With respect to oceans management, through the structures and instruments described above, the Government has moved from a position of conflict avoidance through 'negative' integration, to a more positive approach to integration through consensus building between departments and ministers. On the Policy Integration Scale (see Section 1.2.1), before AOP and regional marine planning initiatives were introduced, the Commonwealth Government worked around a Level 4 with respect to cross-sectoral integration, which ensured that the Government had one voice and that different departments did not take divergent negotiating positions from one another.²⁵⁰ This concept of *not being inconsistent*, or 'negative' integration was achieved by clearing work through

²⁴⁹ TFG International. (2002). "Review of the Implementation of Oceans Policy." Final Report. 25 October 2002.

²⁵⁰ Metcalfe, L. (1994). "International Policy Co-ordination and Public Management Reform." *International Review of Administrative Sciences*, 60: 271-290.

the hierarchical chains of command within each department and being supported by Level 2 type structures, like the OPIDC, involving one-way information exchanges. The introduction of integrated oceans management, as envisaged by AOP and regional marine planning introduced a more proactive approach to planning and management, whereby consensus was sought between ministers and departments on the future direction of oceans management such that sectoral activities and interests were coordinated with each other in the planning stage of development. This approach is consistent with Level 5 on the Policy Integration Scale and reflects Australia's commitment towards integrated ecosystem-based management.

2.4.2 *Cross-jurisdictional arrangements in oceans management*

The Integrated Oceans Management (IOM) Initiative stems from a request of the Natural Resource Management Ministerial Council (NRMMC) and is being carried out by the IOM Working Group (IOMWG) of the NRMMC's Marine and Coastal Committee (MACC), which was established in 2002.²⁵¹ The IOMWG consists of Commonwealth and states working in collaboration to develop a national approach to IOM, with one of the main functions of the IOMWG being to report to the MACC on options for integrated approaches to sustainable oceans use across all jurisdictions.²⁵² The Director of the NOO chairs the IOMWG, with Secretariat support provided by the NOO. This IOMWG is the Commonwealth's method for bringing the states into the negotiation process without revisiting the arduous tensions associated with the Oceans Policy. Cooperation on IOM is not, however, intended to create another layer of bureaucracy or to override current OCS arrangements, which generally constitute reactive cross-jurisdictional agreements on specific sectoral issues, usually limited to bilateral negotiations. Rather, IOM is intended to streamline current arrangements through facilitation of cross-jurisdictional decision-making.²⁵³

The basic principles underpinning IOM stem from the common ground sought through the development of the Inter-Governmental Agreement on the Environment (IGAE) in 1992, the *National Strategy for Ecologically Sustainable Development* (ESD) also in 1992 and the Council of Australian Governments (COAG) in 1997.²⁵⁴ The *National Strategy for ESD*

²⁵¹ National Oceans Office. (2002). "Developing a national approach to integrated oceans management: principles and outcomes." DRAFT Paper for consideration by the IOM Working Group. 13 December 2002.

²⁵² National Oceans Office (2004) "Australia's Oceans Policy Institutional..."

²⁵³ IOMWG (2003). "Joint Statement – Integrated Oceans Management: A collaboration approach to the ecologically sustainable development of Australia's marine resources." Endorsed by the Natural Resource Management Ministerial Council on 3 October 2003; and Vince (2003) "Australia's Oceans Policy:..."

²⁵⁴ IOMWG (2003) "Joint Statement –..."

committed all governments to managing resource uses in a way that ensures ecological sustainability and equity within and between generations, while the IGAE and COAG pushed for enhanced cooperation and integration.²⁵⁵

IOM is the *coordination of planning and management activities and policy development within and between sectors of activity (industries, community) and governments to deliver ecologically sustainable development of the ocean and its resources, based upon and understanding of ecological, social, cultural and economic values.*²⁵⁶ IOM work to date has involved the IOMWG reaching agreement on national outcomes that IOM should achieve and the associated endorsement of these outcomes by the MACC.²⁵⁷ In the December 2003 meeting, the IOMWG worked on ways to deliver these desired outcomes and developed a work program towards this end for 2004.²⁵⁸ One decision resulting from the December meeting was to broaden the scope of the IOMWG to include other Ministerial Council representatives to encompass the full suite of sectoral interests impacted and involved in such decision-making.²⁵⁹ Therefore, the IOMWG now also includes representatives from the Standing Committees for Transport, Tourism and Mineral and Petroleum Resources.²⁶⁰ This extended IOMWG will be charged with the responsibility of working out how to get the national outcomes actioned through their individual chains of command. Some of these actions are already underway, for example the Oceans Guidelines, being developed by the NOO, will establish the guidelines for applying ecosystem-based management to the oceans.

There is debate between the Commonwealth and states about where IOM sits with respect to other policies and plans. It is the states' view that IOM is overarching of both Commonwealth responses, such as AOP and RMP, and state responses, such as coastal planning and water quality initiatives.²⁶¹ Until recently it was the Commonwealth's view, however, that IOM sits under AOP, thus continuing the debate with the states over the endorsement of AOP.²⁶² This view has changed as the Commonwealth realises that they will not get as effective state cooperation if IOM sits under the Commonwealth AOP.²⁶³

²⁵⁵ National Oceans Office (2002) "Developing a national approach..."

²⁵⁶ IOMWG (2003) "Joint Statement -..."

²⁵⁷ Hutchison, E. (2004). NOO: Personal Communication - 8 January 2004; For detail on outcomes specifics, refer to: IOMWG (2003) "Joint Statement -..."

²⁵⁸ IOMWG. (2003). "Working towards arrangements to support integrated oceans management - Proposed work program (2004)." Endorsed by the Natural Resource Management Ministerial Council on 3 October 2003.

²⁵⁹ Hutchison (2004).

²⁶⁰ National Oceans Office (2004) "Australia's Oceans Policy Institutional..."

²⁶¹ From interview with subject NT49.

²⁶² Ibid.

²⁶³ Ibid.

The Otways Case Study in the South-east Region is a test of how the IOM framework will work in practice. If the Otways case does not work, it is questionable just how IOM will practically work as a concept.²⁶⁴ The states will watch the Commonwealth carefully in the Otways Case Study to determine how integration with the states, as part of the IOM initiative, will work in practice. It will be the first such study that will grapple with the concept of moving away from sectoral-based management, towards improving conflicting situations through this new integrated way of management. Much of it is political and will depend on the personal will of those involved.²⁶⁵

The IOMWG is limited to deal with cross-jurisdictional issues as they apply to developing a national approach to IOM and not specifically to the development or implementation of AOP. AOP and regional marine planning are Commonwealth initiatives, therefore are not necessarily recognised as initiatives in need of integration in the IOMWG forum. Therefore, a separate negotiating forum was established under the auspices of AOP to incorporate state interests into regional marine planning. In the South-east Region, a South-east States Consultative Working Group was established to keep states informed on the RMP process. This forum is limited to advising on Commonwealth developments (Level 2 on the Policy Integration Scale) rather than integrating or harmonising management with the states, as is happening under the IOM framework. There is, however, suggestion that this forum may be utilised for the implementation of some actions in the SERMP, including the Otways case study.²⁶⁶

Integrated oceans management has highlighted the inefficiencies of traditional jurisdictional management of the oceans. The IOM initiative is one approach to building the integration capacity in oceans management to cross-jurisdictional administrative boundaries. In terms of the Policy Integration Scale, cross-jurisdictional integration capacity in this process has been at around Level 3, where two-way information exchange between jurisdictions does occur. In the absence of national policies or guidelines, however, there has traditionally been no onus on states or the Commonwealth to incorporate other interests. Where national policies or guidelines do exist relating to oceans management, jurisdictions tend to manage their marine domains through the 'negative' integration principle of *not being inconsistent* with those national policies and guidelines. This approach is at a Level 4 on the Policy Integration Scale. The IOMWG is a proactive integration tool that brings jurisdictions together to reach consensus on a national approach to oceans management issues that cross jurisdictional boundaries. As such it is broaching a Level 5 on the Policy Integration Scale,

²⁶⁴ From interview with subject NT49.

²⁶⁵ From interview with subject TC16.

²⁶⁶ National Oceans Office (2004) "Australia's Oceans Policy Institutional..."

but reservations are held as to the ongoing cross-jurisdictional integration capacity of these arrangements once a set of national integrated oceans management guiding principles are agreed on and the need for such consensus building is reduced. Consensus building could be an interim arrangement in setting the national scope for integrated oceans management, after which time cross-jurisdictional integration capacity will fall back in line with the traditional 'negative' integration approach to management.

2.4.3 *Intra-sectoral arrangements in oceans management with respect to fisheries*

While AOP and the SEMP do not comprehensively address internal fisheries issues, there are some significant commitments made towards enhanced intra-sectoral integration that deserve mention in this chapter. Historically, the Australian Fisheries Management Authority (AFMA) manages the commercial catch of the Commonwealth fisheries through the AFMA Board, on advice from fisheries specific Management Advisory Committees (MACs).²⁶⁷ In light of heightened international and national awareness regarding the interconnectivity and interdependence of marine resource uses, a commitment in the Commonwealth Fisheries Policy Review and in the SERMP means that resource allocation for the recreational and indigenous fishers will be addressed in management plans to encapsulate the full impact of fishery users on the resources and environment.²⁶⁸ In October 2003, the first of quarterly meetings was held between AFMA and RecFish Australia, the national recreational fishers representative body. These meetings are designed to allow discussion of matters such as allocation in shared fisheries, MAC memberships, spatial management and any other issues relating to the coordination of the recreational sector with Commonwealth managed fisheries.²⁶⁹ This is a significant step towards resolving some of the integration issues within fisheries management with respect to recreational and commercial fishing. In addition to these bilateral meetings, in June 2003, the Australian Government made a commitment to accelerate work towards the development of a resource-sharing framework for Commonwealth-managed fisheries through the DAFF (see Section 3.2.1.6.1 for further details on the resource sharing initiative).²⁷⁰

²⁶⁷ *Fisheries Administration Act 1991* (Cth) (as amended), ss.56-67.

²⁶⁸ From interview with subject HK01.

²⁶⁹ From interview with subject FO33.

²⁷⁰ AFFA. (2003). "Looking to the Future: A Review of Commonwealth Fisheries Policy." Canberra: Australian Government Publishing Service: Section 3.9; and National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": Action 1.1.2.

2.5 Conflict management in the Commonwealth Oceans Policy process

Conflict in oceans policy is multi-faceted, crossing vertical and horizontal planes both within and across government and sectoral interests. The ecosystem-based and integrated approach to planning and management underpinning AOP has the potential to engender new conflicts. Traditional sector-based management has meant that resource users have had to develop management plans and frameworks to manage their specific use and impact on resources in isolation. AOP has brought a change in focus to an ecosystem perspective whereby, through such processes as regional marine planning, cumulative sectoral impacts will be assessed against the objectives of AOP. The process has not, however, satisfactorily reached this stage.²⁷¹ Primarily, this has caused tensions between consumptive and non-consumptive users as to the impact each is having on the marine environment and the compensation required for the imposition of further regulations and limitations to traditional practices.

In some government departments there is a distinct lack of inter-agency communication and networking, which can contribute to conflicts between departments and a lack of trust in government.²⁷² While some agencies are very focused and successful in consulting with the public, it is often the case that they neglect to consult internally with other agencies or sections so that a breakdown in communication occurs, which can lead to duplicated effort or misconceptions about what work is actually being carried out.

Often the cause of conflict in natural resource management is that it is being managed on several different levels of government simultaneously and this causes frustration and anxiety as to what is being decided elsewhere 'on the food chain'. This has clearly been demonstrated in some states where there was little knowledge and understanding about what each level of government and the other departments have decided and are currently working on with respect to the Commonwealth's oceans management arrangements.²⁷³

Resource users such as fisheries and the petroleum industries see the major conflict within AOP being with the conservationists. Apart from the philosophical conflict between resource users and preservationists, conflicts eventuate because industries believe conservationists come to the negotiating table not fully understanding, nor focusing on the issues at hand and/or are simply pushing the "emotive conservationist line of attack".²⁷⁴ Industries understand that conservationists have a very broad scope of issues from many

²⁷¹ From interview with subject GJ62.

²⁷² From interviews with subject XU11 and TC16.

²⁷³ Observation resulting from interview process.

²⁷⁴ From interviews with subject EY71 and BS82.

sectors to address and only limited funding to adequately prepare themselves in some cases, but argue that this is no excuse for being under-prepared or narrow-minded with respect to understanding other interests in the area.²⁷⁵ Likewise, in some governmental meetings, especially those involving agencies with a high turnover of staff or with those that regularly use proxies, there is a criticism that the lack of engagement reflects a lack of interest and effort in adequately preparing themselves to be effective in meetings that already have a work history.²⁷⁶ There is clearly a need for new procedures and expectations of those involved in these consultation processes.

2.5.1 *Commonwealth-state relations*

The most prominent conflict that underpins AOP and regional marine planning is the political distrust between the states and the Commonwealth. In focusing on integration between sectors and jurisdictions, the initial national oceans policy development confronted longstanding tensions between Commonwealth and state governments (and between and among resource users) over coastal and marine management. The easing of these tensions, however, abruptly ceased when the Commonwealth stopped consultation with the states and announced the release of the Commonwealth's *Australia's Oceans Policy* without the continuing partnership. This has meant that, despite current MoUs in the northern RMP process, no states have formally endorsed AOP or regional marine planning, thus limiting its formal reach to Commonwealth waters and agencies.

The underlying source of this conflict has, however, little to do with the states' views on best practice for integrated oceans management, but rather it is a product of political mistrust and government concern. The lack of state endorsement has the potential to negatively impact on community's involvement in and support for the policy and planning initiatives under AOP, given that a fundamental distrust within the government itself is not likely to promote wider spread support from state-based stakeholders.

When the NOO was established in 1999-2000 there was, however, agreement at the bureaucratic level that states would work with the NOO.²⁷⁷ In the south-east, this involvement has taken place through the South-east States Consultative Working Group, which has met several times since its inception, highlighting the good relations between staff at the NOO and state representatives at the officer level.²⁷⁸ This Working Group is not advisory, nor decision-making, but rather it comprises representatives remotely involved in

²⁷⁵ From interview with subject BS82.

²⁷⁶ From interview with subject TC16.

²⁷⁷ From interview with subject NT49.

²⁷⁸ From interviews with subject NT49 and TC16.

the SERMP process and is the NOO's way of keeping states in the loop about the Commonwealth RMP process at the operational level.²⁷⁹

2.5.2 Conflict management in the Commonwealth Marine Protected Areas process

The process of developing MPA specifications has been a great source of conflict in itself. A group of ecologists were invited to develop specifications for MPA designations based on their expertise in the area. They initially came up with around 20 specifications, which went to stakeholders for editing and approval and then were peer reviewed by a science and management team. The 'peer review' is a contentious point as it was supposedly the experts in the ecological field that devised the specifications, so the 'peers', or experts for review included the management staff. By the end of the process there were 10 specifications remaining. Controversy surrounds the effectiveness of these specifications in achieving ecosystem-based management. The specifications were altered from their original scientific basis by economic and management interests that centred on minimising conflicts between users and ensuring cost-effectiveness with respect to compliance and enforcement.²⁸⁰ Some researchers believe that the final specifications lack some of the detail, hence the ecosystem-based value, of the original specifications.²⁸¹ Likewise, some stakeholders view the specifications as too broad and non-prescriptive, hence inherently creating the polarisation of stakeholders in the process and impeding consensus-based decision-making.²⁸²

The primary goal of the NRSMPA is to develop a system of MPAs that are:

- comprehensive – that include MPAs that sample the full range of Australian ecosystems;
- adequate – that include a system of MPAs that are of appropriate size and configuration to ensure the conservation of marine biodiversity and integrity of ecological processes; and
- representative – that include MPAs that reflect the marine life and habitats they are chosen to represent.²⁸³

It appears that the selection of MPA specifications lost sight of this primary goal and made the process a political process of reaching agreement rather than meeting the true essence of

²⁷⁹ From interview with subject TC16.

²⁸⁰ Environment Australia / National Oceans Office (2002).

²⁸¹ From interview with subject IN54.

²⁸² From interview with subject FM66.

²⁸³ Commonwealth of Australia. (2003). "Australia's South-east Marine Region: A User's Guide to Identifying Candidate Areas for a Regional Representative System of Marine Protected Areas." Canberra: Environment Australia.

the NRSMPAs, which is for the conservation of a representative sample of marine ecosystems and processes. There is no mention of economic or political parameters in the CAR system and perhaps, these should therefore be included through a complementary set of socioeconomic specifications, in the determination of candidate areas rather than the development of ecological specifications in the first place, which are supposed to be based on ecosystems and biodiversity conservation. That is not to say that science alone can generate the most effective system of MPAs. Stakeholder and political support are essential and must be included in the process for effective implementation to occur. The difficulty lies in striking a balance between the weight and timing of science-driven and politically-driven consideration so that ecological integrity is maintained and industry development is assured in the long-term.²⁸⁴

The MPA process involves several supporting structures tailored to the specific needs of the complex process. The Commonwealth MPA Committee (CoMPAC) comprises representatives from all Commonwealth agencies with an interest in the area.²⁸⁵ This cross-sectoral body is used to avoid surprise reactions in Government by the DEH informing CoMPAC of what is happening in the process, prior to going to the stakeholders. It is the responsibility of the respective agency representative to regularly update their Minister on sensitive issues that may arise for their portfolios. CoMPAC also provides input into the Commonwealth MPA process by highlighting any complementary marine environment management objectives, such as spatial management for fisheries.²⁸⁶ It is noted, however, that despite processes covering more species-specific aspects of management, these often operate on or are implemented using different time scales. It is therefore difficult to predict the impact of different processes on each other or the way in which these complement or contradict each other, even though the integration of spatial management processes is a commitment of the SERMP.²⁸⁷ The Focus Group was initially formed to discuss and refine the BAOI concept as drafted by scientists using reserve design software.²⁸⁸ This group is expertise-based and has since been formally constituted to steer the DEH on the likely reactions of the Stakeholder Reference Group to certain proposals.

Arguably the most important group that the DEH deals with in the process is the Commonwealth MPA Stakeholder Reference Group (SRG). The SRG was established as a

²⁸⁴ Bergen, L.K. and Carr, M.H. (2003). "Establishing Marine Reserves. How Can Science Best Inform Policy?" *Environment*, 45 (2): 8-19.

²⁸⁵ From interview with subject IN54.

²⁸⁶ Commonwealth of Australia (2003) "Australia's South-east Marine Region:..."

²⁸⁷ From interview with subject FM66; and

National Oceans Office (2004) "South-east Regional Marine Plan – Implementing...": Actions 2.3.3 & 2.3.4.

²⁸⁸ From interview with subject IN54.

result of a request from the Australian Seafood Industry Council (ASIC) and environmental NGOs for a better and more open process.²⁸⁹ It comprises a large group of stakeholder representatives nominated by their peers. This group has a formal advisory role, but practically the DEH recognises that support from this group is essential for any official statement of intent to be passed.²⁹⁰ There was some concern, however, that a breakdown in the chain of communication between the ASIC and certain elements of the fishing industry meant that fisheries interests were not being adequately represented in the MPA process.²⁹¹ This issue has since been addressed through a joint project whereby the DEH and NOO provided the ASIC with funding to commission a liaison officer to facilitate the industry's input into the MPA process in the SERMP.²⁹²

The MPAs Stakeholder Reference Group, established as a way to work around isolating interest groups in the decision-making process, was designed to bring sectoral stakeholders to the table and work together on MPA designation. This process, while laudable, fell apart in a September 2003 meeting when fisheries presented their option, oil and gas industry presented their position of no exclusions, and the environmental NGOs came to the meeting unprepared due to absences and funding delays from the DEH.²⁹³ The process then became embroiled in conflict with the DEH having to take on a mediation role and try to keep all the stakeholders at the table. This failed and the DEH agreed to meet with the stakeholders separately to facilitate the development of their individual proposals. The process of separate meetings was the exact opposite to the approach recommended to the DEH. With appropriate mediation training, however, the relevant personnel may have been able to keep control of the situation and continue to work towards an integrated solution.²⁹⁴ What has eventuated is that fishers have stuck to the letter of the specifications and proposed a minimalist option and the environmental NGOs have built on the specifications to propose a much larger MPA proposal.²⁹⁵ Each option is of course 'right', but by developing these options separately the DEH is putting itself in the position of choosing a single 'best' option, rather than working on a consensus-based solution, to the dissatisfaction of one or the other party, or in the worst case – to the dissatisfaction of all parties. This could potentially result in meaningless designations that would require high levels of compliance and enforcement resources resulting from a lack of ownership of the outcomes.

²⁸⁹ From interview with subject GJ62.

²⁹⁰ From interview with subject IN54.

²⁹¹ From interview with subject EY71.

²⁹² From interview with subject FM66.

²⁹³ From interview with subject IN54.

²⁹⁴ Ibid.

²⁹⁵ From interview with subject IN54.

2.5.3 *The National Oceans Office*

Much of the remaining conflict involves the NOO, the primary agency responsible for integrated and ecosystem-based planning and management of Australia's marine environment, including the development and implementation of RMPs.²⁹⁶ The NOO is an Executive Agency located in Hobart, and its location has given rise to scepticism over its ability to work effectively with other Commonwealth officials based in Canberra.²⁹⁷ The initial problems associated with setting up such a specialised office also constrained the capability of the NOO to immediately start on the development of the first RMP, therefore setting the process back at least 12 months.²⁹⁸ The constraints arising from setting up the Office and its processes from scratch also limited the NOO's role in implementing AOP beyond the scope of regional marine planning. This limitation, however, is now recognised and being addressed.

The main conflict to date has been over the role of the NOO and the extent to which it adds value to management.²⁹⁹ Departments based in Canberra have met regional marine planning work by the NOO with suspicion, in part due to the inexperience of the NOO in terms of integrated planning, while being concerned that the ongoing role of the NOO has not been clearly defined. This has led to concerns over the NOO having, or obtaining a 'power of veto' over management decisions. This has been especially evident in processes such as MPA designation whereby the NOO's concept of BAOI created much uncertainty. It is a moot point that had the DEH, with more experience in the area, taken charge of the entire process with its own appropriate timeframe independent of the SERMP process, whether the resulting impasse and conflict not have occurred.³⁰⁰

Potentially the NOO has a significant role in integrated management where individual sectors are unable to resolve issues and manage resources holistically by traditional means. The terms of this involvement remain, however, unclear and are the cause of much underlying anxiety. This issue is one being addressed through the progress of the Otways case study and is one that Board agencies, as well as the states, will closely watch to determine the nature of the NOO's involvement and the potential for its future involvement.

In terms of value-adding, the NOO comes under close scrutiny. Much of the fishing industry sees that the money spent on the NOO would be better allocated to deal with pollution (land-

²⁹⁶ TFG International (2002).

²⁹⁷ Alder and Ward (2001).

²⁹⁸ TFG International (2002).

²⁹⁹ From interview with subject LX67.

³⁰⁰ From interview with subject IN54.

and sea-based) and catchment management issues, which would effectively deal with integration as it applies to ecosystem-based management.³⁰¹ To date, the NOO has been under budget³⁰², however, it has also been under-delivery in terms of desired outcomes.³⁰³ Around 28% of funds spent by the NOO over the first three years were related to establishment costs. This is not unreasonable given the specialised nature of the assigned tasks, yet this has proved costly in personnel time, and may explain the under-delivery in this period.³⁰⁴ It is also recognised that implementing RMPs will incur significant financial burden on the Commonwealth and states. Much of the financial support of AOP to date has come from the sale of a major share of Telstra.³⁰⁵ Alternatives to ongoing funding arrangements, once this source is exhausted have not been identified, causing much anxiety in governments with respect to the ongoing commitment that may be imposed, but unfunded. A major cause of conflict and arguably much of the reason for hesitant support of the SERMP by states and industry, is due to the fact that these costs have not been made explicit for those involved, nor has any ongoing funding assistance been offered to states and external agencies to implement any processes or arrangements in line with RMPs.³⁰⁶ A major component of these implications will be felt through the need for planning, compliance and enforcement arrangements with new commitments under the AOP and regional marine planning. Despite these expected financial implications, it is estimated that if the SERMP improves the value of the overall marine industry output by a mere 0.3%, then it will break even.³⁰⁷ In actuality, the potential return on investment into the SERMP is hard to decipher, as it is generally understood that the large projects, which could potentially have improved the value of the marine industry, would have gone ahead with or without the SERMP. It may result that the states, and even some Commonwealth agencies and industry, will continue to carry the financial burden of implementing the SERMP.

2.5.4 Other oceans management bodies and the SERMP

It is not just the NOO that has had an unsteady beginning. The lack of clarity with respect to the roles of the ministerial-selected NOAG and the SERMP Steering Committee³⁰⁸ has been problematic. After the release of AOP the Government's focus was primarily on establishing the appropriate institutional arrangements and finalising the location of the first

³⁰¹ From interviews with subject MD21 and LX67.

³⁰² Expenditure amounting to 45.7% of planned expenditure over the first three years: TFG International. (2002).

³⁰³ Only two out of five phases of the SERMP completed: TFG International (2002).

³⁰⁴ TFG International (2002).

³⁰⁵ Alder and Ward (2001).

³⁰⁶ From interviews with subject EY71, NT49, ZA91 and LX67.

³⁰⁷ TFG International (2002).

³⁰⁸ The SERMP Steering Committee is no longer convened.

RMP. Despite early efforts to include sophisticated public consultation in the development of AOP, when it came to these decisions of national significance, the community was arguably limited in its capacity to input into the process, with the only external input really being provided by the ministerial-selected NOAG.³⁰⁹ The role of the NOAG has teetered between being an advisory body to, and a representative sounding board for, the NOMB. This has caused some confusion as to its purpose and the best way to incorporate community interests through this body.³¹⁰

The SERMP Steering Committee was assigned the following tasks in its Terms of Reference:

1. contributing to and advising on, the planning process for the South-East Region, including key tasks and milestones as a means of facilitating clearly specified outcomes for inclusion in the SERMP;
2. assisting with RMP assessments including the ecological, social, cultural and economic value of marine resources, opportunities for regional economic development, and the assessment of impacts of proposed outcomes; and
3. providing for peer review throughout the RMP process.³¹¹

The SERMP Steering Committee, acting as an expertise-based committee with a mixed role of facilitating transparency and input of stakeholders into the process and a technical role to provide input into management, science and planning issues, did not have a clear focal point from the beginning.³¹² Future plans are expected to have independent bodies that deal separately with the issues of transparency and technical advice. Membership of this body was also questioned, as the process for selection was not open and transparent, offering no opportunity for the public to nominate members who could offer appropriate regional-based expertise and knowledge into the process.³¹³

Interdepartmental conflicts and conflicts with the NOO have also arisen over the uncertainty over the RMP process. Concerns have been raised over what the RMP process means for each department in terms of resources and structure; and/or why the NOO was effectively 'auditing' each department in the scoping and assessment stages of plan development. The NOO was very unclear about the direction of the first Plan, the SERMP, itself evolving from being a 'plan' to a 'process'. The NOO took a 'bottom-up' approach of extensive

³⁰⁹ Alder and Ward (2001).

³¹⁰ TFG International (2002).

³¹¹ National Oceans Office. (2003). "South-east Regional Marine Plan Steering Committee." http://www.oceans.gov.au/se_steering_committee.jsp [Access date: 9 January 2004].

³¹² TFG International (2002).

³¹³ Alder and Ward (2001).

consultation on detail without having an overall context within which to place the information.³¹⁴ Without clear direction and a lack of effective communication, the NOO has met with a lot of resistance from Commonwealth departments. The NOO, in response to these criticisms, are now consulting with Canberra-based departments in a structured and focused way, with increasing numbers of staff members based in Canberra as liaison officers for government departments. It has been suggested, however, that if regional marine planning brings about nothing more than a shift in focus then it has still been a very significant and worthwhile process.³¹⁵ The SERMP has also been criticised for not introducing anything new. This criticism may, however, reflect the fact that the states and Commonwealth are moving forward towards meeting the objectives of AOP as a result of being involved in the RMP process.

2.6 Summary

Integrated management is a relatively long-lived concept that has yet to be practically implemented in the oceans jurisdiction. This chapter illustrates the developments towards integrated oceans management in Australia, in terms of AOP and regional marine planning commitments and the broader integrated oceans management initiative. These initiatives are designed to meet the increasing demands of ESD through the integration of Australia's oceans resource management based on ecosystem management principles. Integration across ocean use sectors and jurisdictions does, however, give rise to further potential conflicts, as more stakeholders demand input into decision-making processes. This chapter identifies Australia's federal commitment to participative oceans management processes in an attempt to prevent conflict from occurring, primarily through the use of stakeholder driven processes. Despite these advancements, there is an increasing sense of over-consultation by stakeholders who see few tangible outcomes for their efforts.

While integration is occurring in the Australian Commonwealth Government with respect to oceans management, it remains towards the lower echelons of the Policy Integration Scale, with no department or jurisdiction willing to cede too much power to ecosystem-based management in the overall governance framework. As such, it is likely that coordination will be enhanced in Australian oceans management, but integration in terms of ecosystem-based management will be limited to sectoral applications. This concept is explored in the following chapter, which looks at the development of fisheries management in Australia and its capacity to incorporate integrated approaches through ecosystem-based management.

³¹⁴ TFG International (2002).

³¹⁵ From interview with subject NT49.

CHAPTER 3: FISHERIES MANAGEMENT

With the continual decline in fish stocks globally, fisheries management arrangements are under increasing scrutiny. Developments in resource management point towards managing natural resources on an ecosystem basis, taking into account the impact of extraction not only on the resource, but on the habitat and ecosystem within which it resides. As described in Chapter 2, Australia is addressing the challenge of moving from sectoral-based to ecosystem-based management of its oceanic resources. This chapter explores Australia's commitments, both nationally and internationally, to meet the objectives of ecosystem-based management for its fisheries, including those related to integration. Australia's fisheries management is assessed for its capacity to incorporate integration objectives through direct and indirect management arrangements and therefore its capacity to meet the broader objectives of AOP and the SERMP.

3.1 Global fisheries management developments

In 1609 Hugo Grotius introduced the *mare liberum* doctrine that the ocean and its resources were 'common' property and therefore were free for all to exploit.³¹⁶ The 'free and open' access paradigm dictated the pattern of fisheries exploitation globally until the late 1960s and resulted in the over-exploitation of marine resources, in what has been deemed the "tragedy of the commons".³¹⁷ This paradigm provided little incentive to promote conservation of fisheries resources or their environments. Many unmanaged fisheries were well established before the Second World War, with Japan having already established a fully industrialised fishery by this time.³¹⁸ Since the Second World War, increases in technology and demand for food supply has led to the steady increase in world fisheries catch and has highlighted the increasing need for effective management of these catches to prevent global over-exploitation. Stock depletions have attracted global attention and support for the LOSC, which validates national maritime jurisdictions and the responsibility to manage sustainable exploitation of resources within these jurisdictions.³¹⁹

The 1980s and 1990s saw an era of heightened environmental awareness. This was reflected in Australia by the shift in focus by Commonwealth and state governments from a

³¹⁶ Russ, G.R. and Zeller, D.C. (2003). "From *Mare Liberum* to *Mare Reservarum*." *Marine Policy*, 27: 75-78.

³¹⁷ Hardin, G. (1968). "The Tragedy of the Commons." *Science*, 162:1243-1248.

³¹⁸ Hinds, L. (1992). "World marine fisheries. Management and development problems." *Marine Policy*, 16 (5): 394-403.

³¹⁹ Alder, J. and Ward, T. (2001). "Australia's Oceans Policy: Sink or Swim?" *Journal of Environment & Development*, 10 (3): 266-289.

developmental to a sustainability perspective with regard to fisheries practices.³²⁰ A number of international instruments were developed in this period to deal with the sustainable management of marine resources. These include:

- the 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (the Compliance Agreement) – this Agreement is based on Article 91 of the LOSC, which obligates states to ascertain a genuine link between themselves and any vessel they register.³²¹ This Agreement was introduced to strengthen the LOSC provisions, increase the effectiveness of multilateral fishing organisations and to introduce reporting requirements to FAO in an attempt to increase public knowledge of fishing activities in international waters;
- the 1995 Rome Consensus on World Fisheries – an agreement to reduce fishing capacity, rebuild stocks, maintain sustainable fisheries and aquaculture ventures and to support and strengthen regional fisheries bodies and international fisheries developments³²²;
- the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (the Fish Stocks Agreement) – the objective of which is *to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the Convention*³²³; and
- the 1995 FAO Code of Conduct for Responsible Fisheries (Code of Conduct) – this voluntary Code *provides principles and standards applicable to the conservation, management and development of all fisheries. It also covers the capture, processing and trade of fish and fishery products, fishing operations, aquaculture, fisheries research and the integration of fisheries into coastal area management.*³²⁴

³²⁰ Haward, M. (1995). "The Commonwealth in Australian Fisheries Management: 1955-1995." *The Australian Journal of Natural Resources Law and Policy*, 2 (2): 313-325.

³²¹ Anon. "Agreements to Promote Fishery Conservation and Management in International Waters." <http://www.netpets.com/fish/legarchives/mar-8.2.html> [Access date: 29 April 2003].

³²² FAO Fisheries. (1995). "The Rome Consensus on World Fisheries." Adopted by the FAO Ministerial Conference on Fisheries, Rome, 14-15 March 1995.

³²³ United Nations. (1995). "Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks." New York. UN Document: A/CONF.164/37.

³²⁴ Food and Agriculture Organisation. (1995). "Code of Conduct for Responsible Fisheries." <http://www.fao.org/fi/agreem/codecond/ficonde.asp#BAC> [Access date: 29 April 2003]; and Syndes, A.K. (2001). "Regional Fishery Organizations: How and Why Organizational Diversity Matters." *Ocean Development & International Law*, 32: 349-372.

In addition to these international instruments specific to enhancing the sustainable development of fisheries, meetings in 2000 and 2004 of the Conference of the Parties (COP) paved the way for the new and emerging concept of ecosystem-based management. The COP is the governing body of the Convention on Biological Diversity and progresses implementation through taking decisions at biennial meetings. Decisions V/6 and VII/11 of the COP relate to defining the ecosystem approach and its application for *the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way*. This approach has been recognised by the World Summit on Sustainable Development as an important tool for enhancing sustainable development.

The FAO has also recognised the growing international pressure on fisheries management to address integrated issues, through the consideration of ecosystem impacts of fishing. In 2003, the FAO released a technical paper entitled *The Ecosystem Approach to Fisheries. Issues, terminology, principles, institutional foundations, implementation and outlook*.³²⁵ This document embodies the development of ecosystem-based terminology and the relevance to fisheries. It sets out to illustrate the relevance of the Code of Conduct towards implementing an ecosystem approach to fisheries (EAF) and builds on this by establishing a clear set of EAF principles and operational implementation guidelines.

The variation in terminology between this and the CBD application of the ecosystem approach, for instance, is illustrative of the growing interpretive literature in the field of ecosystem-based management. Interpretive license of this terminology stems from the fact that an ecosystem is itself difficult to define, hence we see an increasingly wide and varied application of its meaning in the management of natural resources for the integration of sustainable use and conservation.

3.1.1 Regional Fisheries Management Organisations

Regional Fisheries Management Organisations (RFMOs) are usually decision-making bodies established by three or more States or international organisations that see common gains in cooperating to manage regional fisheries. RFMOs traditionally collect and assess scientific data, set regulatory measures and establish enforcement measures to overcome collective-action problems related to the use of regional fisheries.³²⁶ There are, however, marked differences in capacity amongst and within RFMOs to carry out these functions. RFMOs

³²⁵ Garcia, S.M., Zerbi, A., Aliaume, C., Do Chi, T. and Lasserre, G. (2003). "The ecosystem approach to fisheries. Issues, terminology, principles, institutional foundations, implementation and outlook." FAO Fisheries Technical Paper No. 443. Rome: FAO.

³²⁶ FAO. (1999). "Report of the Meeting of FAO and Non-FAO Regional Fishery Bodies or Arrangements." Rome: 11-12 February 1999. FAO Fisheries Report No. 597: 53pp; Syndes (2001); and Syndes, A.K. (2002). "Regional fishery organisations in developing regions: adapting to changes in international fisheries law." *Marine Policy*, 26: 373-381.

tend to be consensus driven, providing institutional safeguards for Member States with the right to veto and also in order to enhance the probability of compliance and enforcement of decisions made.³²⁷ The authority to enforce decisions is often limited by the States' reluctance to hand over sovereign rights, hence a reluctance to delegate adequate decision-making authority to the RFMO, rendering it an ineffective enforcement body. This problem is exacerbated by the lack of adequate monitoring, compliance, surveillance and enforcement measures at the regional and national levels. This accentuates the fact that even though RFMOs may make strong recommendations and management decisions, they are ineffectual if not implemented with an adequate level of enforcement.

There are other significant limitations in the ability of RFMOs to effectively manage regional fish stocks. Generally, RFMOs are slow in addressing the problem of regional overfishing and overcapacity. This failure has been assigned to a number of problems, the primary problem being the failure by some Member States to accept and implement the international instruments that effectively underpin the functioning of RFMOs and reflect the expectations of the international community. If some States adopt these instruments and others do not, then it emphasises the baseline differences of what States will and will not agree to, which in turn may influence cooperation in the RFMO. Likewise, Non-member States may undertake activities that contradict the mandate of the RFMO and, therefore, compromise the effectiveness of the RFMO in achieving its set objectives.

In terms of data reporting, on which most management decisions are based, some States are reluctant to transparently divulge accurate and complete fishery statistics relating to discards and bycatch for example, for fear of the imposition of further restrictions on fishing practices. States are also reluctant to divulge this information when their nationals have been in breach of the relevant RFMO mandates. In the absence of a global format for the recording and presentation of fishery statistics, some RFMOs are presented with statistics that are in incomparable formats, rendering them collectively unusable.

Illegal, Unreported and Unregulated (IUU) fishing is recognised as the primary issue confronting the effectiveness of RFMOs. FAO has introduced an *International Plan of Action (IPOA) to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing*.³²⁸ This is a voluntary instrument within the framework of the *FAO Code of Conduct for Responsible Fisheries* and as such is limited by a States' willingness to adopt

³²⁷ Hinds (1992); and
Synthes (2001).

³²⁸ FAO. "International Plans of Action." <http://www.fao.org/fi/ipa/ipae.asp> [Access date: 30 April 2003].

the recommendations, whether they be an RFMO member or non-member. To date, there has been varied success in grappling with this complex issue, the primary problem being the lack of national and regional legislation for States to enforce IPOA provisions. In terms of RFMOs, this is in part due once again to the States' reluctance to hand over sovereignty to a central governing body, which may impinge upon their national jurisdiction. Political pressure and consensus or majority vote agreement, however, often addresses this issue adequately so that States will act on the recommendations of the RFMO.³²⁹ The other major challenge is how to impose restrictions on non-RFMO Member States, especially in relation to voluntary instruments such as the IPOA IUU.

The RFMOs that Australia is a party to, which may have relevance to regional marine planning in the south-east region, are the Commission for the Conservation of Antarctic Living Marine Resources (CCAMLR) and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). CCAMLR came into force in 1982 as part of the Antarctic Treaty System.³³⁰ It was formed in response to international concerns regarding the potential impact of increasing krill catches on the Southern Ocean ecosystem. CCAMLR's aim is to conserve the marine life of the Southern Ocean while supporting harvesting practices. The CCSBT came into force in May 1994, formalising the voluntary management arrangements between Australia, Japan and New Zealand for the sustainable management and conservation of Southern Bluefin Tuna (SBT) resources.³³¹

3.1.1.1 *Do RFMOs adequately address the issue of integration as raised in the RMP process?*

Regional marine planning commits Australia to support its international obligations — legislative and institutional. To this end, Australia has proven to be a world leader in the fight to protect the Patagonian Toothfish. Through CCAMLR Australia has fought for the CITES³³² listing of the species, albeit unsuccessfully. Australia has taken a leadership role in addressing the problems of IUU fishing, reflected through national measures such as: the development of a National Plan of Action to Prevent, Deter and Eliminate IUU Fishing; undertaking proactive enforcement against IUU fishers, for instance, through novel changes to legislation allowing for "hot pursuit" provisions; and increased surveillance around Heard and McDonald Islands.³³³

³²⁹ Sydes (2001).

³³⁰ CCAMLR. <http://www.ccamlr.org> [Access date: 18 March 2004].

³³¹ CCSBT. <http://www.ccsbt.org/index.html> [Access date: 18 March 2004].

³³² CITES stands for the "Convention on International Trade in Endangered Species of Wild Fauna and Flora".

³³³ AFFA. (2003). "Looking to the Future: A Review of Commonwealth Fisheries Policy." Canberra: Australian Government Publishing Service. Outcomes 39-42: 52.

Australia supports the CCSBT through a ban on international SBT fishing in the Australian EEZ, including Japanese fishing. During the SBT dispute (1998-2000), a ban was also placed on Japanese port access, which has since been lifted so that any international fishing vessel can use Australian ports on application to the Australian Fisheries Management Authority.³³⁴ The port ban was prompted by Japanese breaches of the CCSBT quota restrictions and a dispute over 'experimental fishing', which occurred concurrently to Japan being taken to the International Tribunal for the Law of the Sea (ITLOS). The implementation of the SERMP needs to take account of measures for the conservation of SBT in our national waters.

3.2 Australian fisheries management

3.2.1 Direct fisheries management arrangements

The Offshore Constitutional Settlement (OCS) negotiations of the 1970s resulted from states challenging the Commonwealth's assertion of sovereignty over offshore regions under common law.³³⁵ Although the Commonwealth retains sovereignty to the low water mark under common law, OCS arrangements, through mirror legislation, gave 3nm jurisdiction to the States.³³⁶ The OCS arrangements for the management of fisheries provided for fisheries to be managed by: the Commonwealth; a state, to the edge of the AFZ; a combination of state control to 3 nm, then Commonwealth control from 3-200 nm; or by a joint authority.³³⁷ Most fisheries are managed by a combination of state and Commonwealth powers.³³⁸ Under the OCS, the 'agreed arrangement' is specific to each fishery and determined independently according to the circumstances influencing management. As such, it addresses cross-jurisdictional integration issues, but only on a specific sectoral scale.

The 1980s saw rapid development of the commercial fishing industry in Australia. This was in part due to the development of the deepwater trawl fisheries in the late 1980s and early 1990s (for example, orange roughy).³³⁹ In 1982 Senator Archer (Tasmania) presented a report with future recommendations for the Australian fishing industry, which was followed

³³⁴ Hender, J. (2004). DAFF: Personal communication – 2 July 2004.

³³⁵ Commonwealth of Australia. (1998). "Australia's Oceans Policy – Part 1." Canberra: Environment Australia.

³³⁶ Examiner's clarification.

³³⁷ Haward, M. (1995). "The Commonwealth in Australian Fisheries Management: 1955-1995." *The Australasian Journal of Natural Resources Law and Policy*, 2: 313-325.

³³⁸ McColl, J.C. and Stevens, R.A. (1997). "Australian Fisheries Management Authority: Organizational Structure and Management Philosophy." In: Hancock, D.A., Smith, D.C., Grant, A. and Beumer, J.P. (eds.). *Developing and Sustaining World Fisheries Resources. The State of Science and Management*. Melbourne: CSIRO Publishing: 655-660.

³³⁹ Kearney, R.E., Andrew, N.L. and West, R.J. (1996). "Some issues in the management of Australia's marine and coastal fisheries resources." *Ocean & Coastal Management*, 33 (1-3): 133-146.

up by the Australian Fisheries Conference held in Canberra in 1985.³⁴⁰ Following these two key events, the Federal Government committed to a review of the *Commonwealth Fisheries Act 1952* and in 1989 produced a White Paper document titled *New Directions for Commonwealth Fisheries Management in the 1990s*, which led the way for future fisheries reform.³⁴¹

Embedded in the *New Directions* report was the means for Commonwealth Government to pass seven new legislative bills regarding fisheries management in Australia.³⁴² The two primary legislative amendments were the *Fisheries Management Act 1991* (FMA) and the *Fisheries Administration Act 1991*. Other legislation dealt with issues such as the cost-recovery of management incursions and penalties.

The FMA defined five primary legislative objectives, replacing the outdated *Commonwealth Fisheries Act 1952*.³⁴³ The objectives of this legislation included:

- implementing efficient and cost-effective fisheries management on behalf of the Australian Government;
- the implementation of ecologically sustainable development principles and the exercise of the precautionary principle, with particular focus on the effects of fisheries practices on non-target species and the long-term sustainability of the marine environment;
- maximising economic efficiency in the exploitation of fisheries resources;
- ensuring accountability to the fishing industry and to the community in AFMA's management of fisheries resources; and
- achieving government targets with respect to the recovery of the costs of AFMA.³⁴⁴

More specifically, the FMA established the basis for the following:

- specific management plans;
- the AFMA to establish statutory fishing rights (quasi-property);
- a joint authority;
- initial allocation processes and allocation review; and
- enforcement and monitoring.

³⁴⁰ Haward (1995); and
 Haward, M., Bache, S., Tsamenyi, M. and Rose, G. (2000). "Fisheries: Australia." Scoping Paper for ACORN I: Vancouver. 10-11 December 2000.

³⁴¹ Haward (1995); and
 McColl and Stevens (1997).

³⁴² Haward (1995).

³⁴³ Smith, A.D.M., Sainsbury, K.J. and Stevens, R.A. (1999). "Implementing effective fisheries-management systems – management strategy evaluation and the Australian partnership approach." *ICES Journal of Marine Science*, 56: 967-979.

³⁴⁴ *Fisheries Management Act 1991* (Cth) (as amended), s.3.

Simultaneously, the *Fisheries Administration Act 1991* was brought into force.³⁴⁵ The objectives of this Act were two-fold:

- to establish an Australian Fisheries Management Authority to manage fisheries on behalf of the Commonwealth; and
- to establish a Fishing Industry Policy Council to ensure participation by all interested parties in the decisions relating to the development of government policy with respect to fisheries management.

In 1997, a change was made to the FMA objectives to include the precautionary principle.³⁴⁶ In 1999, a series of technical amendments were made to the FMA to improve its operation and effective management practices. The *Fisheries Legislation Amendment Act 1999* was primarily written to incorporate the UN Fish Stocks Agreement, dealing with straddling and highly migratory fish stocks, and IUU fishing.³⁴⁷

Two other legislative amendments were passed in 2004. The first amendment addressed high seas fishing activities and other matters to give legal effect to Australia's domestic obligations under the FAO Compliance Agreement and to improve the AFMA's operating efficiency and effectiveness.³⁴⁸ The second legislative amendment addressed compliance and deterrence measures.³⁴⁹

3.2.1.1 *The Australian Fisheries Management Authority*

Prior to 1992, the Australian Fisheries Service (AFS), located in the Department of Primary Industries and Energy, provided the services of the AFMA.³⁵⁰ The AFS received much criticism for its management decisions. Fisheries were collapsing, fleets were expanding, there was a distinct lack of coordination between the fishing industry, management and science and the industry had no participatory role in management decision-making.³⁵¹ Combined with the pending challenges posed by the *New Directions* document, these criticisms indicated that a new body corporate was required to replace the AFS to meet the increasing demands on the fishing industry.³⁵²

³⁴⁵ Smith, Sainsbury and Stevens (1999).

³⁴⁶ Gullet, W. (2004). Examiner's advice.

³⁴⁷ Haward *et al* (2000).

³⁴⁸ *Fisheries Legislation Amendment (High Seas Fishing Activities and Other Matters) Act 2004*

³⁴⁹ *Fisheries Legislation Amendment (Compliance and Deterrence Measures and Other Matters) Act 2004*.

³⁵⁰ McColl and Stevens (1997).

³⁵¹ *Ibid.*

³⁵² Haward (1995).

The AFMA is a statutory body that replaced the AFS on 3 February 1992 under the *Fisheries Administration Act 1991*.³⁵³ The AFMA consists of a Board of expertise-based members including a Chairperson, Governing Director, Managing Director and five selected directors.³⁵⁴ To ensure that the commercial fishing industry does not use this forum for personal gain for the industry, the number of members from the fishing industry is restricted to two.³⁵⁵ The Board has three committees (the Finance and Audit Committee, the Research Committee and the Environment Committee) to help the Board in the conduct of its business.³⁵⁶ The Australian Bureau of Agricultural and Resource Economics (ABARE) and the Bureau of Rural Sciences (BRS) regularly assess the performance of the AFMA to ensure its objectives and the objectives of the FMA are being met.³⁵⁷ The AFMA's primary role is the day-to-day management of Commonwealth fisheries resources on the high seas, within the 200nm Australian Fishing Zone where this is possible and sometimes, upon negotiation under the OCS arrangements, to the low water mark, on behalf of the Australian public. In managing these resources, the AFMA provides "management, advisory, compliance and licensing services and implements appropriate fisheries management arrangements" stressing the necessary stakeholder involvement in all key areas of management decision-making.³⁵⁸ Final decision-making with respect to the management of Commonwealth fisheries is, however, the responsibility of the AFMA Board. This ensures that the Minister responsible for the fisheries portfolio stays at arm's length from these decisions in an attempt to keep the influential, but often misguided, politics out of effective and sustainable fisheries management. The AFMA is responsible for setting the Total Allowable Catches (TACs), reference points and other management arrangements for each of its fisheries by means of individual management plans according to the needs of the fishery. As of 1994-95, management costs incurred by the AFMA have been recovered from industry via levies.³⁵⁹

³⁵³ Haward (1995).

³⁵⁴ Smith, Sainsbury and Stevens (1999).

³⁵⁵ Ibid.

³⁵⁶ AFMA. (2004). "About AFMA." <http://www.afma.gov.au/about/board/default.php> [Access date: 16 March 2004].

³⁵⁷ Smith, Sainsbury and Stevens (1999).

³⁵⁸ AFMA. (2003). "About AFMA." Fact Sheet No. 21. <http://www.afma.gov.au> [Access date: 16 March 2004].

³⁵⁹ Haward (1995); and
McColl and Stevens (1997).

3.2.1.1.1 Does the AFMA provide adequate capacity to address the issue of integration as raised in the RMP process?

The AFMA governance structure operates at arm's length from the Government and as such, provides little opportunity for formal engagement or cross-sectoral integration with other Government departments or management agencies. However, the AFMA must operate within the bounds of current Government policy, including the Oceans Policy and the commitment towards ESD. This includes informal coordination and information exchange with relevant Government departments. On the Policy Integration Scale, as discussed in Section 1.2.1, the AFMA's statutory authority lends itself to a lower level (Level 1 or 2) of integration capacity with other sectors. The AFMA is, however, legislatively required to pursue the policy objectives of the *Fisheries Management Act 1991* and the *Fisheries Administration Act 1991*, which include ESD and therefore necessitates a degree of integration across sectors.

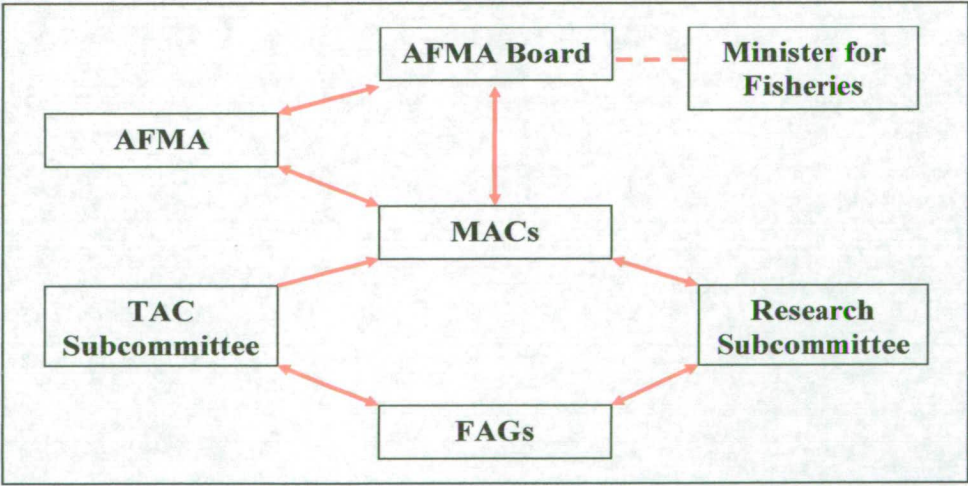
In terms of cross-jurisdictional integration, the AFMA has a minimal integration capacity that is confined to informal information exchange. The capacity for formal cross-jurisdictional integration comes under the OCS agreed arrangements. OCS arrangements are negotiated by the Department of Agriculture, Fisheries and Forestry (DAFF) on behalf of the Commonwealth, with advice from sought from the AFMA. The OCS agreements have their own limitations as they are reactive and usually species or fishery specific, offering little capacity for strategic cross-jurisdictional integration on any broader regional or intra-sectoral scale.

The impetus for intra-sectoral integration also falls primarily on the DAFF charged with fisheries policy coordination, which includes resource sharing arrangements between fisheries sectors, such as recreational, indigenous and commercial (see Section 3.2.1.6.1). The AFMA has taken an informal proactive approach to intra-sectoral coordination by sponsoring quarterly meetings with the recreational sector to discuss intra-sectoral integration issues, hence enhancing the informal capacity for integration between fisheries sectors. Intra-sectoral integration has also been approached in an advisory capacity through the Management Advisory Committees (MACs: see Section 3.2.1.2.1 below for a more detailed discussion).

3.2.1.2 Management Advisory Committees

To assist in the establishment of legitimate management practices, the AFMA has the authority to establish MACs or Consultancy Committees (CCs) for each federal fishery.³⁶⁰ MACs are expertise-based advisory bodies, designed as ‘co-management’ tools to increase transparency and industry-government relations in what has been deemed the AFMA’s “partnership approach to management”.³⁶¹ This partnership approach is important in engaging stakeholders to take ownership of decisions and also to have a greater responsibility for the well-being of individual fisheries. The primary objective of MACs is to advise on appropriate fisheries management plans, defining the objectives, concessions and allocation of these concessions and the rules that apply to participants in the specified fishery.³⁶² MACs are a *part of* the AFMA and as such must adhere to the legislative and operational objectives of the agency.³⁶³ Recommendations resulting from deliberations of the MACs are presented to the AFMA Board (see Figure 3), but the Board need not make an immediate decision on such recommendations if more information is required. The absence of the necessity of the Board to make immediate decisions regarding recommendations has been an issue in the past, as many such recommendations have been merely ‘noted’, effectively prolonging the lifetime of the issue in the absence of a decisive action. As a result, the AFMA’s Communications Strategy is under review and future efforts will lie in the prompt dissemination of information between the Board and MACs.³⁶⁴

Figure 3 Australian fisheries management institutional arrangements.



Adapted from: Smith, A.D.M., Sainsbury, K.J. and Stevens, R.A. (1999). “Implementing effective fisheries-management systems – management strategy evaluation and the Australian partnership approach.” *ICES Journal of Marine Science*, 56: 967-979.

³⁶⁰ Smith, Sainsbury and Stevens (1999).

³⁶¹ Haward (1995).

³⁶² McColl and Stevens (1997).

³⁶³ Collins, G. (2002). AFMA: Personal Communication - 16 December 2002; and See Figure 3 for fisheries management institutional arrangements.

³⁶⁴ Ibid.

MACs comprise an independent AFMA selected chair, an AFMA officer (usually the officer responsible for the management of the fishery and who is the only member that is essentially representative of any particular interest) and up to seven other members as nominated by relevant stakeholder groups and determined by the AFMA Board for their expertise in commercial fisheries, science and, increasingly, recreational fisheries and environmental or conservation interests pertinent to effective management of the fishery.³⁶⁵ As *experts* rather than *representative* members, it is important that industry members have the confidence of the industry, but can differentiate the potential for personal gains from the best interest of the fishery as a whole. MAC members in general must also demonstrate a commitment and preparedness to negotiate to achieve acceptable outcomes.³⁶⁶

In some instances, representatives of other areas of expertise may be selected by the AFMA Board as 'Permanent Observers' on the MACs. Permanent Observers are required to participate in MAC discussions in accordance with the requirements of other members, however, if deliberations eventuate in a voting situation, they would have to abstain from voting. The DEH has been granted Permanent Observer status for the term of the strategic assessments in accordance with the EPBC Act. Permanent Observers usually indicate a transitional time for policy or management of the fishery and allow for some flexibility in MAC numbers, whilst not granting the permanency of full membership. DEH Observers are required to make the appropriate commitment in attending meetings without substitution and to make a positive contribution to the MAC to which they are assigned.³⁶⁷ 'Casual Observers' may also attend meetings at the Chair's discretion to provide additional advice or expertise for a particular agenda item or for the purposes of observing the operations of the MAC, although they may not participate in MAC decision-making processes.³⁶⁸

Sub-committees may be convened to advise the MAC on particular issues. These sub-committees may comprise outside expertise so long as there is at least one MAC member and numbers are kept to a minimum.³⁶⁹ Fisheries Assessment Groups (FAGs) consisting of science, economic, industry and management representatives are established to produce an annual assessment to the TAC and Research Subcommittees of the stock in question (see

³⁶⁵ ACIL Consulting. (2001). "Management Advisory Committees: Concept and Conduct." A Report to the Australian Fisheries Management Authority: Canberra; and McColl and Stevens (1997).

³⁶⁶ AFMA. (2002). "Management Advisory Committees." Fisheries Management Paper Series: FMP No. 1.

³⁶⁷ AFMA (2002) "Management Advisory Committees."

³⁶⁸ Ibid.

³⁶⁹ Ibid.

Figure 3).³⁷⁰ These subcommittees then assess the stock assessment and advise the appropriate MAC on the course of management action that they deem to be appropriate.

3.2.1.2.1 Do MACs provide adequate capacity to address the issue of integration as raised in the RMP process?

MACs address conflict management objectives through participation and ownership of processes, yet also address the issue of integration through inclusive representation. MACs comprise definitive stakeholders, including commercial fishers with a *legitimate* claim to the use of the resource and whose claims demand the *urgent* attention of managers, due to the potential impact decisions will have on their livelihoods. The *power* to make decisions lies with the AFMA Board in accordance with the FMA. However, the inclusion of AFMA managers and key commercial fishers on MACs ensures that there is significant influential power to convince decision makers to take on advice from the MACs. Increasingly, conservation is gaining definitive status as the *urgency* of environmental protection is brought to the forefront of planning and management, *power* is achieved through environmental legislation such as the EPBC Act and *legitimacy* is channelled through ESD requirements of government policy, such as the *National Strategy for ESD*. Other expectant stakeholders, such as recreational fishers, who do not possess *power* to influence decisions, are increasingly being included in MACs, due to their *legitimacy* under the FMA and the *urgency* to address resource sharing arrangements to meet ESD and Oceans Policy objectives.

MACs provide opportunity for integration through inclusion of the broader interests and stakeholders discussed above. The degree to which these interests are integrated is questionable. Most non-commercial interests are included as observers with no power to influence final recommendations from the MACs. Hence when relating such co-management arrangements back to the Policy Integration Scale, the capacity for intra-sectoral integration is around Level 2, comprising one-way information sharing. This type of integration, however, is in itself limited by the advisory nature of MACs and the fact that ultimate decision-making power lies with the AFMA Board.

³⁷⁰ Smith, Sainsbury and Stevens (1999).

3.2.1.3 *The AFMA's plans of management*

In developing a plan of management, the AFMA is required to set out:

- a. the objectives of the plan of management; and
- b. measures by which the objectives are to be attained; and
- c. performance criteria against which the measures taken may be assessed.³⁷¹

Plans of management for individual fisheries may include the following information:

- the fishing methods – based on area/time closures, species types, size/quantity of fishing gear and/or number of boats – and the type and quantity of fishing gear to be used in the fishery;
- the fishing capacity allowed for the fishery;
- an indication whether management is to be by a system of registered statutory fishing rights (SFRs), or other fishing concessions;
- a description of the fishery – including the area, fish species, fishing method and any other relevant matter;
- allocation procedures – including auction, tender or ballot;
- obligations and special circumstances applicable to the SFR/fishing concession holder; and
- the prohibition or regulation of recreational fishing and scientific research in the fishery.³⁷²

In accordance with the FMA, the National Bycatch Policy and the EPBC Act, plans of management must also incorporate measures to reduce bycatch to a minimum. This means minimising the incidental capture of fish and other species not covered by the plan of management (see Section 3.2.1.5.2 on Bycatch Action Plans).

3.2.1.3.1 Do the AFMA's plans of management adequately address the issue of integration as raised in the RMP process?

Many initiatives for further integration in fisheries have been raised in the RMP process. The most prominent initiative with respect to fisheries management is the integration of commercial, recreational, aquaculture and indigenous interests. Currently, the AFMA's plans of management do not allow for such integration, being limited to the management of commercial fishing operations.

³⁷¹ FM Act 1991. Division 2. Section 17. Sub-section 5

³⁷² FM Act 1991. Division 2. Section 17. Sub-section 6.

The plans of management do not adequately consider the impacts each fishery may have on other stakeholders, however, external influences on each fishery are assessed, for example through the EPBC Act export assessment process. While environmental impacts are receiving adequate attention, the social and economic impacts of the fishery on the communities and other industries have not yet been assessed. Integration in regional marine planning would suggest that it is important to assess and adequately address these developing issues through appropriate management responses. This is currently achieved through bilateral negotiations of issues as they arise (for example, fishing and seismic surveys). Regional marine planning, however, has introduced a concept of preventative management with respect to integration that should be embraced by the fishing industry through early identification of potential issues.

3.2.1.4 *The Southern and Eastern Scalefish and Shark Fishery*

In September 2003, the Hon Dr David Kemp MP, Minister for the Environment and Heritage, wrote to the AFMA advising of the endorsement of the Southern and Eastern Scalefish and Shark Fishery (SESSF) Management Plan 2003.³⁷³ The SESSF incorporates the South-east Trawl Fishery (SETF), the Great Australian Bight Trawl Fishery (GABTF) and the Gillnet, Hook and Trap Fishery (GHATF; which is a amalgamation of the former Southern Shark and South-east Non-Trawl Fisheries) in a working model for a fisheries management framework that has a greater focus on ecosystem-based fisheries management objectives as committed to in Government policy, including the SERMP. Through this amalgamation, the AFMA hopes to be able to better manage intra-sectoral³⁷⁴ issues through overarching goal and objective setting and to better facilitate and track the transfer of quota between fisheries.³⁷⁵ The SESSF Management Plan gives the AFMA a more effective framework to manage the impact of the Southern Region Fisheries on the environment through a variety of management mechanisms, one of which is the setting of global TACs for the SESSF.³⁷⁶

Two new institutional arrangements have been introduced with the SESSF Management Plan to aid integration and implementation. The first is the SESSF Fisheries Assessment Group (SESSFAG), which coordinates all the underlying FAGs associated with the amalgamated

³⁷³ AFMA Management. (2004). "Agenda Item 8.1: Strategic Assessment." SETMAC85. February 2004. <http://www.afma.gov.au> [Access date: 6 June 2004].

³⁷⁴ AFMA refers to these as 'cross-sectoral' issues, with each fishery operating as a 'sector'. In the oceans management context, these issues are referred to as 'intra-sectoral' as they are contained within the scope of the fishing sector.

³⁷⁵ AFMA. (2002). "Strategic Assessment Report – Southern and Eastern Scalefish and Shark Fishery." Draft for public comment 31 July – 31 August 2002.

³⁷⁶ AFMA. (2003). "A guide to the 2004 South East Trawl Fishery Management Arrangements." Canberra: AFMA. December 2003.

fisheries in the SESSF. These include the Shelf, Slope, Deepwater and Shark FAGs. The SESSFAG provides collective advice to the AFMA Board, through the AFMA Board Research Sub-Committee, and to the MACs on biological, ecosystem and economic issues for the SESSF.³⁷⁷ The other joint body is a joint MAC, taking over from the SESSF TAC Sub-Committee, which meets after attending the plenary session of the SESSFAG. The joint [Southern Region] MAC will include the SETMAC, the GABMAC and the GHATMAC and will be charged with advising the AFMA Board on issues relating to the global TAC process in the SESSF.³⁷⁸

The SESSF Management Plan establishes Statutory Fishing Rights (SFRs) for fishers in the SESSF. Fishers previously fishing under the SETF, GABTF and the GHATF will be issued with a 'boat SFR' or 'fishing permit', which entitles the fisher to take non-quota species using specific input controls, such as particular fishing methods or areas, and/or 'quota SFR' that allows the holder of the boat SFR or fishing permit to fish for specific quota species. There are three steps in the granting of SFRs, each step having an associated appeals processes.

These steps are:

1. *Registration* – fishers must register with the AFMA for eligibility to apply for the grant of SFRs (that is, eligibility depends on registration with the SFR option and quota unit registers on the 'snapshot' date – 3 December 2003³⁷⁹ – if there are any disputes over eligibility, applicants may seek an internal review by the AFMA within 21 days and if dissatisfied with this outcome, then the applicant may apply for a further review to the Administrative Appeals Tribunal (AAT) within 14 days³⁸⁰);
2. *Provisional Grants* – the AFMA will issue a provisional grant to all fishers who were found eligible (if there are any errors or the applicant believes they are entitled to more SFRs than provisionally assigned, they may appeal to the Statutory Fishing Rights Allocation Review Panel); then

³⁷⁷ AFMA (2002) "Strategic Assessment Report...": 23; and

AFMA (2003) "A guide to the 2004 South East Trawl..."

³⁷⁸ AFMA (2003) "A guide to the 2004 South East Trawl..."

³⁷⁹ Ibid: 14.

³⁸⁰ AFMA. (2003). "Southern and Eastern Scalefish and Shark Fishery Management Plan 2003. Frequently Asked Questions." Canberra: AFMA. 17 February 2003: 5.

3. *Final Grants* – holders of provisional grants will be given the opportunity to apply for the final grant of SFRs within a given time period (any conditions imposed on SFRs are appealable to the AFMA within 21 days of being granted and if dissatisfied with this outcome, then the applicant may apply for a further review to the AAT within 14 days³⁸¹) and the SFRs will then come into effect on 1 January 2005.³⁸²

Statutory Fishing Rights are fully transferable within the Southern Region Fishery, with only a few exceptions. Leasing is allowed for quota SFRs unless the quota has already been fished against in that year. Quota SFRs are labelled either Type N (originally registered as quota units in the GHATF) or Type T (originally registered as quota SFRs or quota units in the SETF or GABTF).³⁸³ In practice there is no difference between the types, both being quota SFRs, but rather this labelling was introduced to meet industry concerns of monitoring transfers between fisheries to ensure correct levies are paid for each quota SFR.³⁸⁴ The SFR Register maintained by the AFMA will record information pursuant to any transfers that occur, leasing arrangements and the boats nominated against boat and quota SFRs. The AFMA may also impose certain management tools to complement the SESSF Plan. These include:

- *determinations* – for example, for setting a TAC, overcatch and undercatch;
- *directions* – for example, for area closures or gear restrictions;
- *conditions on the SFR or fishing permit* – for example, reporting using particular logbooks or VMS; or
- *regulations* – for example, for species managed by the states.³⁸⁵

3.2.1.4.1 Does the SESSF adequately address the issue of integration as raised in the SERMP?

The SESSF is a significant advancement towards the intra-sectoral integration of fisheries in the south-east, as committed to in the SERMP. The cumulative ecosystem impacts of major commercial fisheries operations in the region can be accurately recorded, assessed and managed through registered boat-SFRs with associated input controls and global TAC setting for the SESSF quota-based fisheries. The amalgamated fishery provides a working 'blueprint' for global TAC setting, with the potential application to include other interests, including recreational and indigenous fisheries in the future. As a pilot amalgamation, the

³⁸¹ AFMA (2003) "...Frequently Asked Questions": 5; and Smith, K. (2004). AFMA: Personal communication – 5 March 2004.

³⁸² AFMA (2003) "A guide to the 2004 South East Trawl...": 15.

³⁸³ AFMA (2003) "...Frequently Asked Questions": 3.

³⁸⁴ AFMA (2003) "...Frequently Asked Questions."

³⁸⁵ AFMA (2003) "...Frequently Asked Questions": Attachment 1.

SESSF will be used to determine the 'actual' benefits of ecosystem-based management for the commercial sector and the potential benefits of application to the broader interests in the fishery.

Despite this significant step towards intra-sectoral integration to meet the objectives of ecosystem-based management, the SESSF applies to only three major fisheries in the Region. There are still some 27 state and Commonwealth commercial fisheries that lie outside the jurisdiction of SESSF that operate in the area covered by the SERMP. Many of these excluded fisheries will not directly impact the SESSF, due to differences in targeted species, areas and fishing methods. They may, however, indirectly impact the SESSF through ecosystem linkages and should therefore, theoretically be managed inclusively.

3.2.1.5 *Commonwealth Fisheries Bycatch Policy*

Bycatch comprises of three main components of fishing interaction. First is the portion of the catch that is incidentally caught, but not targeted, and kept or sold by the fishing operator. This is often referred to as 'by-product' and is generally incorporated into the AFMA's plans of management for commercial fishing operations. 'Discards' are the portion of the catch incidentally caught, but not targeted, which is returned to the sea due to the lack of commercial value or because regulations preclude the inadvertent catch being retained. Finally there is the portion of the 'catch' that is not landed, but is impacted by interaction with the fishing vessel, gear or operations.

The *Commonwealth Policy on Fisheries Bycatch* (CPFB) refers primarily to discards and those species that are not landed but are impacted by the fishing operation. By-product species should be encompassed in existing management arrangements. The CPFB sets out the guiding principles, objectives and framework for implementing the policy through Bycatch Action Plans (BAPs). The CPFB builds on the *National Policy on Fisheries Bycatch* to meet the Federal Government's commitments to bycatch reduction under AOP, by ensuring that all direct and indirect impacts on the marine system are taken into account and managed accordingly.³⁸⁶

The guiding principles underpinning the policy include: fostering stewardship; promoting cooperation and transparency; ensuring complementary objectives for the short and long-term, which cross jurisdictions and departments; using robust biological reference points and in the absence of such, to apply the precautionary principle to management; and finally, to

³⁸⁶ Commonwealth of Australia. (2000). "Commonwealth Policy on Fisheries Bycatch." Canberra: June 2000. <http://www.affa.gov.au> [Access date: 20 June 2002].

develop BAPs, recognising the biological, ecological, economic and social nature of fisheries.³⁸⁷

More specifically these goals have been refined in the CPFEB to guide management towards ensuring that bycatch species and populations are maintained. The sub-objectives, nestled under this primary bycatch maintenance objective, are to:

- reduce bycatch;
- improve protection for vulnerable species; and
- arrive at decisions on the acceptable extent of ecological impacts.³⁸⁸

There are a number of strategies suggested in the CPFEB for implementing these objectives. These range from codes of conduct and management plans to the development, adoption, monitoring, reviewing and improvement of mitigation measures, incentive programs, education and awareness programs and the improvement and refinement of scientific data collection that underpins biological reference points used in BAPs.

3.2.1.5.1 Bycatch Action Plans

The AFMA has the responsibility to manage the BAP process and for ensuring that resultant actions are implemented accordingly. BAPs identify bycatch issues, data requirements, options and possible solutions for issues raised in their development. BAPs were required for all Commonwealth fisheries by end of March 2001 and must undergo biennial review in accordance with the Five Year Strategic Plan and Five Year Strategic Research Plan for each major fishery. The MACs responsible for these major fisheries formed special committees in order to prepare the BAPs. BAPs were submitted to the MACs and the AFMA's Environment Committee for endorsement and then submitted to the AFMA Board for final approval, before public dissemination and incorporation into statutory management plans or management policy.

A number of issues are raised in the CPFEB for consideration in the development of BAPs. These are:

- defining the issues and prioritising them;
- defining whether the issue is species/fishery/method/region specific or if it relates to the management status of the region;
- defining whether the issue is a result of the nature of the fishery or of the management regime;

³⁸⁷ Commonwealth of Australia (2000) "Commonwealth Policy on Fisheries Bycatch."

- determining what information and/or analysis is already available regarding:
 - the status/vulnerability of the stocks/species concerned;
 - the economic benefits of reducing discards;
 - the impacts of the fishery on other species;
 - the mortality rate of discards; and
 - the conservation significance of the issue and its impact on biodiversity, foodwebs, recreational/indigenous fisheries, trade/economy and the environment;
- identifying strategies that address interactions with vulnerable species;
- identifying the groups affected by the issue;
- determining if there are any engineering solutions and their relative effectiveness;
- identifying international obligations, trade issues, state/territory policies/initiatives, legislative obligations, codes of practice, management/industry practices or education programs; and
- determining who should pay for any proposed actions or management measures.³⁸⁹

3.2.1.5.2 Do BAPs adequately address the issue of integration as raised in the RMP process?

BAPs explicitly address the integration objectives of the RMP process through the CPFB commitment to ensure that BAPs are developed in “harmony with related legislation, international obligations and national policy directions”.³⁹⁰ There is also a commitment for the actions identified in the BAPs to be incorporated into fishing concession conditions, SFRs and into fisheries directions, regulations and/or management plans. BAPs could be strengthened as a tool for integrated management by ensuring that complementary requirements for inclusion in the AFMA’s plans of management are incorporated into the FMA and/or the EPBC Act.

The *Check List for Developing a Bycatch Action Plan*³⁹¹ in the CPFB, clearly articulates that BAPs should address: intra-sectoral integration issues, such as recreational and indigenous catch; cross-jurisdictional integration issues, such as international obligations; and cross-sectoral/departmental issues, such as due consideration of arrangements already in place to mitigate bycatch. The Check List also clearly states that information and analysis already available should be used in the action plan, therefore avoiding duplicated effort.

³⁸⁸ Commonwealth of Australia (2000) “Commonwealth Policy on Fisheries Bycatch.”

³⁸⁹ Ibid.

³⁹⁰ Ibid.

³⁹¹ Ibid.

3.2.1.6 Commonwealth Fisheries Policy Review

The *New Directions for Commonwealth Fisheries Management in the 1990s*³⁹² underpinned the review of the *Fisheries Act 1952*, which resulted in the development of the FMA and related legislation applicable to Commonwealth fisheries today. The *New Directions* document established three over-arching objectives for management controls, which included: the conservation and sustainability of fisheries resources and their environment; the maximisation of economic efficiency; and cost-recovery.

The document addressed features such as:

- a preference for market forces (that is, ITQs) to govern management;
- cost-recovery in line with the principle that those who benefit should pay the cost;
- the need to precisely define access rights and develop a formal register of those rights;
- the development of management plans for all commercially viable fisheries;
- economic priority setting;
- the establishment of an independent specialist review panel to address allocation issues;
- structural adjustment packages to reduce fishing capacity;
- research funding arrangements;
- industry codes of practice (for example, for minimising bycatch);
- introduced species and disease;
- regulation and representation of recreational fishers;
- the establishment of the AFMA, the AFMA Board and MACs;
- the need for cross-jurisdictional fisheries coordination;
- and the complete review of fisheries legislation.³⁹³

In June 2000, some ten years after the release of the *New Directions* policy document, the then Minister for Fisheries, the Hon Warren Truss, MP announced his intention to carry out a CFPR to evaluate the performance of the current fisheries policy in response to the new challenges arising in natural resource management. These challenges included: increases in technological sophistication; increases in recreational fishing activity; recognition of indigenous fishing activity; new environmental legislation; integrated oceans management initiatives; high seas fishing; and aquaculture development.

³⁹² Commonwealth of Australia. (1989). "New Directions for Commonwealth Fisheries Management in the 1990s." Canberra: Australian Government Publishing Service.

³⁹³ Ibid.

In November 2000, industry and stakeholders were brought together in a conference, *Looking to the Future*, designed to establish the parameters of the review.³⁹⁴ The Review Steering Committee was then formed and an Issues Paper was released on 16 January 2001.³⁹⁵ This Paper highlighted the need to move with the growing trend towards ecosystem-based management, to ensure Australia's involvement in prominent international agreements and to establish access security to the fisheries resources for all user groups. The primary focus of the Issues Paper, however, was on ESD. Being a whole-of-government review, the CFPR was intended to assess the functioning and management of all relevant government departments including Agriculture, Fisheries & Forestry – Australia (now DAFF), the AFMA, the NOO and Environment Australia (now DEH).

As part of the CFPR a series of 12 port visits were carried out in January 2001. This forum provided the general public and representatives from all user groups with a chance to input into the Policy Review Process. The Review Steering Committee met six times between December 2000 and June 2001 and in this period, 47 written submissions were received. In July 2001, a draft report was submitted to the new Minister, the Hon Wilson Tuckey, MP. Following this report, Minister Tuckey decided to conduct a further 11 stakeholder consultations. The information was then supposed to be collated in preparation for the final document, which was due for release early 2003. However, another change in Minister to the present Minister, Senator Ian MacDonald, dictated that the process be postponed once again until such time as this Minister familiarised himself with the CFPR report and the issues pertaining to that report. Effectively, the CFPR was 'shelved' for some six months.

In June 2003, *Looking to the Future – A Review of Commonwealth Fisheries Policy* was released. This document contained 52 outcomes, or directions for Commonwealth Fisheries Policy that were intended to guide the management of Commonwealth fisheries into the new millennium.³⁹⁶ These directions were in the following areas:

- integrating Commonwealth fisheries policy with other strategic initiatives;
- ecologically sustainable development;
- economic efficiency, cost-recovery and adjustment in fisheries;
- improved management of Commonwealth fisheries;
- education, compliance and enforcement;
- fisheries research;

³⁹⁴ Review Steering Group. (2001). "Commonwealth Fisheries Policy Review." Canberra: Agriculture, Fisheries & Forestry - Australia.

³⁹⁵ Ibid.

³⁹⁶ AFFA. (2003). "Looking to the Future: A Review of Commonwealth Fisheries Policy." Canberra: Australian Government Publishing Service: 48.

- resource sharing and improved cross-jurisdictional arrangements;
- security and cancellation of access rights and penalties;
- preference for output controls in the form of ITQs;
- international fisheries issues;
- food safety and quality;
- biosecurity, marine pests and fish health;
- building partnerships for the future; and
- realising aquaculture potential.³⁹⁷

Whilst *Looking to the Future* addresses many pertinent and emerging issues in the AFMA efficiency, industry expansion and aquaculture development, it fails to incorporate initiatives that would fluidly move Commonwealth fisheries towards integrated management as committed through such initiatives as regional marine planning and the National Coastal Policy. Many issues, such as recreational fisheries, a preference for ITQs, cost-recovery and cross-jurisdictional coordination, are carry-over issues from the *New Directions* policy document and have been highlighted again in the CFPR, indicative of the complexities involved in adequately addressing these more difficult issues.

3.2.1.6.1 Does the CFPR adequately address the issue of integration as raised in the RMP process?

Outcome 22 of the CFPR (and Action 1.1.2 of the SERMP) commits the Government to develop a national resource sharing and management framework covering commercial, recreational, charter, aquaculture and indigenous fishing. There is, however, no precedent for this type of integrated management and the outcome is highly dependent on how the resource is initially allocated. In light of the fact that recreational fisheries were addressed with respect to this issue in the *New Directions* document without avail, it would appear that a more defined allocation protocol or policy should be defined before shared management can be adequately addressed. In this regard, the DAFF has established a Resource Sharing and Management Working Group (RSMWG) comprising management and definitive and expectant stakeholders, including commercial and recreational and charter interests, to deal with the complex issue of multi-sectoral fishing allocations and to provide advice to the Minister for Fisheries, Forestry and Conservation (the Minister). This group first met on 24 November 2003 and has since developed a Draft Framework for Resource Sharing and Management (the Framework).

³⁹⁷ AFFA (2003) "Looking to the Future...": 48-53.

The RSMWG has proposed a logical stepped approach to providing advice to the Minister on the allocation of fisheries resources between sectors. This sophisticated approach includes recognition of the potential need for conflict management techniques as described in this thesis. The first stage will be for facilitated negotiation between Working Group members to reach agreement on resource allocation between sectors.³⁹⁸ If Working Group members are unable to negotiate an agreeable allocation between the sectors themselves, then the use of a mediator will be considered, either from within DAFF, or appointed by DAFF.³⁹⁹ Finally, if an agreeable outcome is still not reached, then an Independent Allocation Panel appointed by the Minister, should be considered.⁴⁰⁰

The Framework commenced pilot testing in the Eastern Tuna and Billfish Fishery and the Southern and Western Tuna and Billfish Fishery on 4 February 2004.⁴⁰¹ Some participants in the RSMWG are concerned that the process is moving towards a political deadline, which is perhaps too fast to adequately address the complexities involved in such allocation procedures.⁴⁰² Alternatively, focusing on process rather than the practical application of a 'working' process, may compromise the principle objective of the Australian Government for ESD. There are also concerns that the lack of financial support provided to recreational fisheries participants will impact on the representativeness of the working group.⁴⁰³ This is being partially overcome through the use of teleconferencing and electronic information dissemination.

The Framework envisages that the Minister's final allocation decision, based on the advice of the RSMWG, will be applied to the Total Allowable Catch (commercial) managed by the AFMA.⁴⁰⁴ It is anticipated that once these allocations are determined, management arrangements between the Commonwealth and the states and Northern Territory will be developed through the Australian Fisheries Management Forum (AFMF), but states and the Northern Territory will retain access rights of non-commercial uses and will assign the appropriate management arrangements.⁴⁰⁵ In this regard, through the AFMF, fisheries are well established to deal with cross-jurisdictional fisheries issues at the national scale and at the regional scale through the Northern and Southern Fisheries Management Forums (which

³⁹⁸ Department of Agriculture, Fisheries and Forestry. (2004). "Draft Framework for Resource Sharing and Management." Revised draft Discussion Paper from 24 November 2003 meeting. Canberra.

³⁹⁹ Ibid.

⁴⁰⁰ Ibid.

⁴⁰¹ Hurry, G. (2004). Personal Communication - 5 January 2004.

⁴⁰² From interview with subject FO33.

⁴⁰³ Ibid.

⁴⁰⁴ Department of Agriculture, Fisheries and Forestry. (2004). "Explanation of Framework." Support documentation for 4 February 2004 meeting of RSMWG.

⁴⁰⁵ Department of Agriculture, Fisheries and Forestry (2004) "Draft Framework..."

are sub-sets of the AFMF).⁴⁰⁶ Integration within fisheries is currently minimal, around a Level 1 or 2 on the Policy Integration Scale, with either one-way information sharing or relatively independent decision-making by individual 'sectors'.⁴⁰⁷ Coordination occurs only at the higher level policy setting. This commitment to resource sharing will enhance fisheries managers' capacity to integrate fisheries through ecosystem-based management in order to meet the objective of ecologically sustainable development.

Compliance is a major issue facing contemporary fisheries management. This is especially so in high seas fisheries and with regard to IUU fishing activities in the AFZ. It is, however, important that domestic fisheries are also monitored for their level of compliance ensuring, amongst other things, the validity of the data to be used in stock assessments. A less orthodox approach to domestic compliance and enforcement would be for Government to work with industry to enhance the acceptance of and, indirectly through associated networking, the integration of management measures within the industry and the community. Government policy and management plans are not always readily understood by the layperson and that the best way to educate people is through extensive consultation and outreach programs, ensuring that operational standards that are adopted are not so flexible that they cannot then be enforced. This also works in reverse; government can use these forums to find out how practical management plans are and what is working effectively or what could be done for plans to work better on the ground.

Recent funding commitments for SeaNet,⁴⁰⁸ an extension program designed to bridge the gap between government, researchers and industry, illustrates the Government's commitment towards better education, however, this has only been guaranteed for another one year. An appropriate Education Policy would complement this commitment by giving education programs some long-term vision. This is also illustrated through the AFMA's emerging commitment towards enhancing education with respect to regulations as a compliance mechanism through the National Compliance Strategy.⁴⁰⁹

⁴⁰⁶ Department of Agriculture, Fisheries and Forestry. (2003). "A Framework for Resource Sharing and Management in Commonwealth-managed Fisheries." DRAFT Discussion Paper prepared for the 24 November 2003 meeting of the RSMWG in Canberra.

⁴⁰⁷ In this instance, 'sectors' refers to commercial, recreational, indigenous and aquaculture interests.

⁴⁰⁸ SeaNet was granted \$400,000 funding from the NHT for 12 months guaranteed with discussions of a further 3 years.

⁴⁰⁹ AFFA (2003) "Looking to the Future...": Outcome 18: 49; and Craik, W. (2003). "Australian Fisheries Management Authority Annual Public Meeting." Hobart: Quarantine Centre, Macquarie Wharf No 1, Hunter Street, 17 October 2003.

3.2.2 Indirect fisheries management arrangements

Until 1998, the AFMA dealt with the management of fisheries and the Fisheries Policy Branch of the Department of Primary Industries and Energy (DPIE) dealt with the policy decisions and implementation. In 1998, however, the DPIE underwent restructuring and Agriculture, Fisheries and Forestry – Australia (AFFA) was established (now the DAFF). As part of the Industry Development Group of AFFA, the Fisheries Policy and Aquaculture Branch (FAB) was formed to take over the role of the Fisheries Policy Branch of DPIE. In comparison to the fisheries management responsibilities of the AFMA, FAB is charged with the responsibility for broader fisheries policy, international fisheries negotiations and strategic fisheries issues.⁴¹⁰ FAB works closely in conjunction with all those with interests in fisheries, to progress legislative amendments, to provide policy and infrastructure support for the AFMA and to provide advice to the Minister. The FAB work program is centred on three main focus areas:

- *International Fisheries* – which provides policy advice on bilateral, multilateral and regional fisheries agreements and related issues;
- *Aquaculture, Food and Trade* – which provides advice on national aquaculture industry development, including through the Aquaculture Action Agenda, and coordination of the seafood supply chain, including seafood safety and market and trade strategies; and
- *Strategic Fisheries Policy* – which provides policy advice on national fisheries policy issues, Offshore Constitutional Settlement, legislative processes, resource access and use including native title and recreational fishing.⁴¹¹

In light of increasing environmental regulatory demands, the Fisheries and Forestry Environment Branch was established in 2002 to provide advice to the Minister on sustainable fishing practices and environmental issues affecting or affected by fisheries practices. This Branch also consists of three sections including:

- *Marine Industries Environment* – which provides policy advice for sustainable fishing including the effects of fishing on non-target species and the marine environment, including bycatch policy involving both international and national plans of action for seabirds and sharks (and actions for other listed species), use of marine protected areas and ecosystem-based regional marine planning under AOP and the development of a National Coastal Policy;

⁴¹⁰ AFMA. (2003). "What is AFMA?" <http://www.afma.gov.au>

⁴¹¹ Adapted from: Department of Agriculture, Fisheries and Forestry Phone List – 29 January 2004.

- *Fisheries Action Program* – which incorporates the management and finalisation of the Fisheries Action Program and the co-ordination and facilitation of all fish related matters concerning the Natural Heritage Trust; and
- *Invasive Marine Pests* – which coordinates the development of national policies at the Commonwealth and state/territory level to help prevent incursions and translocations of exotic marine pests, particularly by commercial shipping operations.⁴¹²

3.2.2.1 EPBC Act – fisheries management requirements

The demand for effective environmental monitoring of Australia's fisheries has increased in response to international developments such as: the LOSC in 1982, which established a right to exploit the marine resources and an obligation to protect the marine environment; the UNCED in 1992, which defined the concept of sustainable development and introduced the precautionary approach to management; and the Convention on Biodiversity in 1992,⁴¹³ which introduced the concept of integrated ecosystem management, recognising MPAs as a key conservation measure. In Australia, this shift in focus resulted in the consolidation of environmental controls and for a third party environmental auditing process to occur at the Commonwealth level.

Thus, in September 2000, after Environment Australia (now DEH) revised Schedule 4 of the *Wildlife Protection (Regulation of Exports & Imports) Act 1982*, the Minister for Environment and Heritage amended the Act to remove the export-control exemption for most marine fisheries.⁴¹⁴ Previously exempt state and Commonwealth export-fisheries are now subject to assessment by December 2004 under the EPBC Act.⁴¹⁵ Under this Act, marine species will be exempt from export controls if they are harvested in accordance with management arrangements assessed as ecologically sustainable. Those species found to be subject to export controls under the EPBC Act will require an export permit or authority to be issued before export of the species is approved.

The EPBC Act has also introduced the requirement that all Commonwealth fisheries, including those without export components, would commence a strategic environmental assessment by July 2005. Two-thirds of the assessments were to commence within the first

⁴¹² Adapted from: Department of Agriculture, Fisheries and Forestry Phone List – 29 January 2004.

⁴¹³ Sainsbury, K. and Sumaila, U.R. (2001). "Incorporating ecosystem objectives into management of sustainable marine fisheries." Paper presented at the Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem. Iceland: Reykjavik. 1-4 October 2001.

⁴¹⁴ AFFA. (2003). <http://www.affa.gov.au>

⁴¹⁵ EPBC Act. (1999). Part 13A.

three years of the Act coming into effect (that is, by July 2003).⁴¹⁶ For those fisheries without a related management plan in place, it is a requirement that they undergo a strategic assessment before the AFMA can determine the appropriate plan of management. Due to these requirements, the focus of strategic assessments to date has been on export-fisheries and those Commonwealth fisheries in the development stages of plans of management.

One other type of assessment that can occur under the auspices of the EPBC Act relates to the incidental capture of protected species. This assessment can be carried out to accredit a fishery on the basis of the management plan including reasonable measures to avoid the incidental capture of or interference with protected species and/or requirements to record interactions with protected species. Without this accreditation, operators may be prosecuted for any capture of protected species, even if it is only incidental.

3.2.2.1.1 Strategic assessments

Strategic environmental assessments are carried out in accordance with a set of guidelines, the *Guidelines for Ecologically Sustainable Management of Fisheries*, which are based largely on the Marine Stewardship Council principles looking at the condition of the fish stock, the impact on the marine environment and the fishery's management system.⁴¹⁷

In meeting national ESD requirements for fisheries management, the Commonwealth Government requires that fisheries are managed in accordance with the following two principles:

Principle One: A fishery must be conducted in a manner that does not lead to over-fishing, or for those stocks that are over-fished, the fishery must be conducted such that there is a higher degree of probability the stock(s) will recover; and

Principle Two: Fishing operations should be managed to minimise their impact on the structure, productivity, function and biological diversity of the ecosystem."⁴¹⁸

⁴¹⁶ AFMA. (2003). <http://www.afma.gov.au>

⁴¹⁷ Marine Stewardship Council. (2002). <http://www.msc.org> [Access date: 20 June 2003].

⁴¹⁸ Environment Australia. (2001). "Guidelines for the Ecologically Sustainable Management of Fisheries." <http://www.deh.gov.au/coasts/fisheries/assessment/guidelines.html> [Access date: 20 June 2003].

Each strategic assessment must include:

- a comprehensive description of the fishery, including information about the:
 - management agency;
 - species caught;
 - fishing methods used;
 - area fished;
 - number of operators; and
 - historic and current fishing effort;
- a detailed description of the environment likely to be affected;
- the management arrangements applicable to the fishery;
- an environmental assessment (as incorporated in the ESD framework) including the fisheries impact on the:
 - target species;
 - non-target species or bycatch; and
 - general ecosystem;
- a performance report identifying the measures intended to prevent, minimise or compensate for the potential environmental impacts on the fishery, including any proposed independent environmental auditing or feasible alternatives and justifications as to the final choice; and
- the source and reliability of any information used in the assessment.⁴¹⁹

Strategic assessments are carried out to determine if the principles and associated objectives and guidelines for management are being adhered to, to ensure the ecological sustainability of the fishery.

3.2.2.1.2 Do strategic assessments adequately address the issue of integration as raised in the RMP process?

Strategic assessments determine if the management plan incorporates the capacity to address ESD as raised in the *National Strategy for ESD* and the EPBC Act. However, there is no requirement for the re-assessment of management plans once approved, to determine if ESD objectives are being met in practice. Therefore, while the original assessment provides opportunity for cross-sectoral integration with environmental conservation interests in a two-

⁴¹⁹ Department of Environment and Heritage. (2003). “*Environment Protection and Biodiversity Conservation Act 1999* Benchmarks for the Environmental Assessment of Fisheries.” <http://www.deh.gov.au/coasts/fisheries/assessment/benchmarks.html> [Access date: 17 March 2004].

way information exchange, assessment and response process, there is no ongoing commitment to maintain this integrative relationship.

Another flaw in the strategic assessment process relates to intra-sectoral integration issues. The strategic assessment process neglects to formally address the social and economic aspects of the fishery. These aspects will have a significant impact on the performance of any management system and should be recognised in the management plan. One way to accomplish this and avoiding duplicated effort, would be to adopt the ESD reporting framework (see Section 3.2.2.2) in its entirety. This framework addresses the intra-sectoral integration capacity of fisheries assessment to address social and economic aspects of fisheries management, but fails to provide a broader cross-sectoral integration capacity that would look at the impacts of and on other resource users (see Section 3.2.2.2 for discussion of this point).

3.2.2.2 ESD reporting – *The ‘How To’ Guide for Wild Capture Fisheries*

In early 2000, in response to increasing pressure on fisheries to conform to ever increasing environmental monitoring practices, the Fisheries Research and Development Corporation (FRDC), through its ESD Reporting and Assessment subprogram, funded a project to develop a new ESD reporting framework for Australian fisheries.⁴²⁰ The *‘How To’ Guide for Wild Capture Fisheries* (the Guide) is a guide for ESD reporting that is designed to meet the increasing demands of government policy and legislation by reducing duplication of effort. The proposed ESD report provides the foundations for strategic assessments under the EPBC Act, internal auditing processes and for environmental accreditation, similar to that provided internationally by the MSC. Environmental accreditation is a powerful management tool for fisheries. It enables accredited fisheries to readily access markets and provides leverage in doing so. The ESD reporting framework would provide the foundations for this accreditation to occur. The proposed reporting also provides a clear direction for wild capture fisheries with respect to integrated management as proposed in AOP by including the wider economic, social and environmental implications of each fishery. In doing so, the reporting framework builds on the EPBC Act’s strategic assessments, which do not address the social and economic implications of wild capture fisheries.

⁴²⁰ Fletcher, W.J., Chesson, J., Fisher, M., Sainsbury, K.J., Hundloe, T., Smith, A.D.M. and Whitworth, B. (2002). “National ESD Reporting Framework for Australian Fisheries: The ‘How To’ Guide for Wild Capture Fisheries.” FRDC Project 2000/145. Australia: Canberra.

3.2.2.2.1 Steps in ESD reporting

For the purpose of this framework, ESD is broken up into eight components relevant to fisheries. These are categorised in three groups and are as follows:

Contribution of the fishery to ecological well-being

1. Retained species;
2. Non-retained species;
3. General ecosystems;

Contributions of the fishery to human well-being

4. Indigenous well-being;
5. Community and regional well-being;
6. National social and economic well-being;

Factors affecting the ability of the fishery to contribute to ESD

7. Impact of the environment on the fishery; and
8. Governance arrangements.⁴²¹

The first step to ESD reporting is the identification of issues, or hazards as they apply to the fishery. The Guide outlines a set of generic component trees, one tree applicable to each of the ESD components listed above. These generic component trees provide a starting point for issue consideration and provide some consistency to the previously haphazard brainstorming process that was issue identification.

The next step in the process is the prioritisation of issues by using risk analysis tools. Each issue is assigned a level of consequence (from negligible to catastrophic) and the likelihood of this consequence occurring (from remote to likely). The combination of consequence and likelihood levels is assigned an overall level of risk and then management actions are assigned accordingly. The assignment of risk is highly dependent on interpretation and may vary considerably from analyst to analyst. It is therefore important that clear justifications accompany each level of risk assigned to each issue.

The third step is a response to the risk analysis whereby performance reports are completed on the issues raised in step one. There are two main types of reports; those that entail a justification only of the conclusion – primarily because the risk ratings assigned in step two were sufficiently low to warrant not having any management actions; and those that require a full performance report detailing all elements of the proposed management system.

Performance reports are written for each issue with a risk rating high enough to trigger a management response. Reports must include the operational objective related to the management of the issue, an indicator and associated performance measure to assess the performance against the operational objective and a management response that is designed to achieve acceptable performance.

The final step is the compilation of background material on the fishery and the environment in which it operates. Understandably, this step may need to be completed first or information may be gathered throughout the process ready for ordered compilation at the end. The material covered in this section refers to the: history of the fishery; where the fishery operates; the fishing methods used; the major species targeted, habitats and ecosystems that could be affected; and the biological characteristics of the main species and habitats involved.

3.2.2.2.2 Limitations of ESD reporting

Full ESD reporting is voluntary and for it to be of actual benefit to fisheries, this reporting should be incorporated into fisheries legislation to ensure that proposed management actions are actuated. Without legislative backing it is possible for fisheries managers to choose to implement the easier management responses, generally low risk options that support the ESD framework but do not necessarily incorporate a full suite of ESD actions. There may be situations where implementation of the more difficult, higher risk management actions may have greater benefit to the fishery.

Another draw back of the ESD reporting structure is that it relies on qualitative risk analysis, thus drawing on the analyst's interpretation of risk to the fishery. For this reason, there needs to be stringent mechanisms to ensure their objectivity is not hampered by, for instance, political or industry pressure. One way around this would be to obtain an assessment from at least two independent scientists, using a third should arguable discrepancies arise, although this option is recognised as being resource intensive. There also needs to be clear definitions for each fishery with regard to each issue about what warrants a catastrophic consequence and what each level of likelihood means. Another alternative is to apply a form of quantitative risk based analysis, such as the Management Strategy Evaluation methodology (see Section 7.3.4).⁴²²

⁴²¹ Fletcher *et al* (2002): 8-9

⁴²² Smith, A.D.M., Sainsbury, K.J. and Stevens, R.A. (1999). "Implementing effective fisheries-management systems – management strategy evaluation and the Australian partnership approach." *ICES Journal of Marine Science*. 56: 967-979.

3.2.2.2.3 Does the ESD framework adequately address the issue of integration as raised in the RMP process?

There is a need for some form of coordination of reporting and reporting requirements at the Commonwealth level. This is evident through analysis of the number and scope of legislation and policies applicable to Australian fisheries that require some form of fisheries reporting. These include the reporting requirements of the strategic assessments under the EPBC Act, environmental accreditation requirements for MSC or Australian approval, requirements under the SERMP, initiatives under the Commonwealth Fisheries Policy Review and the AFMA's management plans. With more efficient management these could be streamlined to minimise duplication and industry scrutiny and to strengthen current management arrangements.

ESD reporting for wild capture fisheries makes up one component of the *National Strategy for ESD*. Caution must be given to the application of new and emerging terminology, such as 'ecosystem-based' management proposed in the SERMP, to ensure that duplication of effort through new reporting requirements is minimised. For example under the auspices of the EPBC Act, fisheries are subject to strategic assessment in accordance with components 1-3 of ESD listed above. It would also be of benefit for the AFMA to adopt ESD reporting as proposed here in its entirety (including components 4-8) as part of its fisheries management plans. This would minimise duplicated effort of reporting and set fisheries up in a strong position to enter into integrated management, perhaps adding value and credibility to current management practices.

3.3 What are the conflicts specific to Australian fisheries resulting from integration issues?

There are five basic types of fishery conflicts. These are as follows:

- I. Jurisdictional conflicts – who controls the fishery? What is the optimal form of management? What is the role of government?
- II. Management mechanisms – how is the fishery controlled? (for example, enforcement issues, quota allocation issues, co-management issues).
- III. Internal allocation issues – relations between fishery users (for example, religious, ethnic, recreational, commercial, indigenous).
- IV. External allocation issues – relations between fishers and other users of the aquatic environment (for example, tourism, conservation, oil and gas).
- V. Philosophical issues – relations between fishers and non-fishery issues (for example, environment, politics, economic change).⁴²³

In dealing with fisheries specific conflicts the social status of the actors must be taken into consideration, as should the historical frictions between and the political weight of actors. When government is involved, careful consideration must be given to the political gains and general politics that may be influencing decision-making.⁴²⁴ The economic impacts of management decisions must not be ignored and these must be weighed against the social and environmental impacts in making conflict management decisions. It is important that any scientific information must be unbiased and independent due to the supple nature of data interpretation that can easily be influenced by those in power.

3.3.1 Type I – Jurisdictional conflicts

Type I conflicts in Australia are dealt with under Offshore Constitutional Settlement (OCS) arrangements, whereby the relevant states and the Commonwealth reach agreement on management arrangements for cross-jurisdictional fisheries. These OCS arrangements have

⁴²³ Bennett, E., Neiland, A., Anang, E., Bannerman, P., Atiq Rahman, A., Huq, S., Bhuiya, S., Day, M., Fulford-Gardiner, M. and Clerveaux, W. (2001). "Towards a better understanding of conflict management in tropical fisheries: evidence from Ghana, Bangladesh and the Caribbean." *Marine Policy*, 25: 365-376; and

Charles, A.T. (1992). "Fishery conflicts: a unified framework." *Marine Policy*, 16 (5): 379-393.

⁴²⁴ Orbach, M.K. (1989). "Of Mackerel and Menhaden: A public policy perspective on fishery conflict." *Ocean & Shoreline Management*, 12 (3): 199-216.

been the subject of much criticism from outsiders, but generally seem to provide good management solutions to those involved directly in negotiations.⁴²⁵ The OCS arrangement for fisheries is based on principles for delivering species-based management rather than jurisdictional management. This is usually carried out by entrusting the management of the species or population over its entire range to one or the other jurisdiction. However, it still remains that while OCS arrangements deal with cross-jurisdictional conflicts, they neglect to adequately deal with intra-sectoral conflicts.⁴²⁶ The OCS arrangements work well when there are no on-water interactions (such as, for tuna and Rock Lobster), but further work is required on how the Commonwealth and states can have joint authority in practice.⁴²⁷ Other problems that have arisen with the OCS relate to multi-species, multi-gear fisheries and complementary management arrangements across jurisdictional lines.⁴²⁸ It is believed, however, that despite these problems any negatives associated with OCS can be resolved through a renegotiation of MoU terms and conditions.

Conflict also occurs with neighbouring nations over fisheries resources. This is particularly evident in the north with IUU fishing by Indonesians, and in the south with IUU fishing in Australia's sub-Antarctic waters. This conflict weighs heavily on Government with few mechanisms outside the judicial system to prevent this from occurring.

3.3.2 *Type II – Management mechanisms*

Type II conflicts regarding how fisheries are controlled can occur between governments where there is a distinct lack of continuity in management across jurisdictional boundaries. This can be either between states or between the states and Commonwealth. Many of these inconsistencies are dealt with in the current fisheries management plans and OCS arrangements. Many would refute, however, that these plans do not encompass the nature of the issues in their entirety. Their success in achieving sustainable management is also questionable considering the number of fisheries still being overfished. Certain states see the management of Commonwealth fisheries as driven by economic efficiency, which is included in the Commonwealth's FMA as a separate objective, and that states do not emphasise this objective as it detracts from the ESD principles on which natural resources are managed.⁴²⁹ This point is arguable in that economic efficiency is an obvious driver for

⁴²⁵ From interviews with subject NT49 and LX67.

⁴²⁶ From interview with subject NT49; and
National Oceans Office. (2002). "Developing a national approach to integrated oceans management: principles and outcomes." DRAFT Paper for consideration by the IOM Working Group. 13 December 2002.

⁴²⁷ From interview with subject NT49.

⁴²⁸ From interview with subject LX67.

⁴²⁹ From interview with subject NT49.

any commercial fishery, whether it be state or Commonwealth, and it is a moot point whether this is made explicit in legislation, which some would consider being upfront and transparent, or whether it is just implied. The RMP process has the potential to provide a new forum for discussing these conflicts within the broader context of marine resource users. This in itself has provided much conflict with some arguing that the MACs currently hold this power, believing these issues do not impact other resource users significantly enough to warrant a new negotiating forum.

The operations of MACs raises many conflicts, including much long-lived and lively debate. Some believe the MACs do not work as well as they should and are incapable of addressing broader resource use issues and impacts across boarders due to their industry-based focus. The issue of representative membership versus expertise-based membership continually re-emerges with no clear answer. There is also a belief by some in the fishing industry that, despite the theoretical impartiality of MAC members, MAC members often push their own agendas to the detriment of others unrepresented on these MACs.⁴³⁰ Another issue relevant to the effective and efficient functionality of MACs is the often-high turnover of the AFMA staff. This in itself poses a problem in some instances whereby management changes hands quite regularly, losing the 'expertise' and memory required for such an advisory committee to work efficiently.

The timely development of management plans is in itself a source of conflict between industry and the Government. For example,⁴³¹ in the SENTF (Trevalla) fishery quotas were issued based on catch history over a defined period. This occurred, however, when catches in Tasmania were comparatively low to other state's catches, therefore resulting in quota allocations equivalent to around 37% of the then current Tasmanian catch. Some fishers have accelerated their catches or rejoined the fishery since then, but this has not been reflected in historic management decisions. The catch history period and the periodicity of management plan reviews were so far apart that it did not reflect current fishing arrangements.

Another concern raised by stakeholders and constituents is the lack of regard the AFMA has for external expertise with respect to giving priority to issues raised by stakeholders and acting on them in a timely manner.⁴³² The AFMA needs to be careful of industry capture.⁴³³ For example,⁴³⁴ in Tasmania in the late 1980s approximately 42,000t of orange roughy was

⁴³⁰ From interviews with subject EY71 and MD21.

⁴³¹ From interview with subject MD21.

⁴³² From interview with subject LX67.

⁴³³ From interviews with subject LX67 and FO33.

⁴³⁴ From interview with subject LX67.

taken in one year. This raised concerns with the industry and with others as they saw the imminent collapse of the fishery, but the AFMA either chose to do nothing or was not equipped to react in a timely fashion to save the resource for the maximum benefit of all Australians.

3.3.3 *Type III – Internal allocation issues*

Internal allocation issues, or Type III, between recreational, commercial and indigenous fishers are currently confronting Australian Commonwealth fisheries and policy managers. Even within the commercial sector for instance, there are often conflicts between fishers that use different gear types. This is evident in the waters around Tasmania where trawlers in the SETF are often involved in destructive gear interactions with other fisheries, such as the crab fishery. Fundamentally, many non-trawl fishers believe that trawling should be banned by the AFMA as a means of meeting the objectives of ESD, as it is effectively a “clear felling of the oceans”⁴³⁵ and as such significantly impacts the environment and the livelihoods of other resource users who depend on the health of these ecosystems.

As discussed in Section 3.2.1.6.1 (the Commonwealth Fisheries Policy Review), resource sharing arrangements are currently being addressed by the Commonwealth. In addition, recreational fishers are also pushing for equal representation on MACs for fisheries in which resources are shared and allocated among sectors.⁴³⁶ Recreational fishers have been granted observer status on some of these MACs, but they see this as “second rate citizen status”.⁴³⁷ This in itself presents conflict as MACs are a tool primarily for the management of commercial fishing operations, yet including appropriate capacity for recreational management is alluded to in the FMA where it refers to the fact that management plans *may* “prohibit or regulate recreational fishing in the fishery”.⁴³⁸ Another contentious point is that MACs are meant to be expertise-based rather than representative. Despite this direction, it is evident that these expert members are not adequately representing certain interests that lie outside their field of expertise, but which make up a significant component of the fishery.

Traditionally fishing for subsistence, indigenous fishers are under-represented in management processes, yet are increasingly seeking opportunities to join in commercial fishing operations. This is in part due to the lack of commitment by indigenous people to the

⁴³⁵ Comment made by M. O’May at the AFMA Annual Public Meeting for the Fishing Industry. Hobart: 17 October 2003.

⁴³⁶ From interview with subject FO33.

⁴³⁷ From interview with subject FO33.

⁴³⁸ *Fisheries Management Act 1991* (Cth) (as amended), s.17(6(h)).

Government's management methods, rather than a lack of opportunity.⁴³⁹ It is clear, too, that the 'culturally challenged' method of engagement by Government creates this lack of commitment. This illustrates a fundamental conflict of cultures that is not easily addressed by western conflict management tools and approaches. Perhaps a combined effort incorporating experience and knowledge from both cultures will be needed for these parties to work together for the long-term sustainable management of Australia's fisheries resources.

3.3.4 Type IV – External allocation issues

Conflicts in Australian fisheries have risen as a result of a heightened awareness with regard to ecosystem-based management and a need for better management. Type IV conflicts between fishers and conservation users of the environment have been addressed by the requirements of the EPBC Act. These requirements indicate that all Australian export fisheries must undergo a strategic assessment by 2003 and all remaining fisheries must undergo a strategic assessment by 2005. These assessments will determine if management practices in place meet with the stringent conservation and environmental protection standards of the EPBC Act. One conflict involved in this case is between departments whereby one department, the DEH (formerly known as Environment Australia), is effectively auditing another, the AFMA, against environmental criteria that should already be met under the AFMA's management plans. There is debate as to whether the DEH is the most appropriate body to undertake this review given its lack of knowledge of fisheries management processes and in most cases, the actual fisheries. In general, however, the assessment process has been accepted as highlighting some of the inadequacies of current fisheries management practices in addressing ESD. Another element that has the potential to cause great debate is whether another layer of assessment will be imposed under the RMP process. Any multi-layered bureaucratic checking system has the potential to demean both the AFMA's management ability and the trust in the industry, which could further lead to non-compliance.

Fundamental conflicts arising from both the non-consumptive and consumptive use of the marine environment have been raised through AOP's commitment towards a National Representative System of Marine Protected Areas (NRSMPAs). This commitment has led to great debate over structural adjustment issues primarily to do with displaced fishers. This is a revolutionary debate that will set the precedence for future structural adjustment claims, so must be managed with great care. Some fishers believe that there is a burning need for a rigid 'Structural Adjustment' Policy that clearly outlines the circumstances under which

⁴³⁹ From interview with subject ZA91.

compensation will be assigned and how this will be decided.⁴⁴⁰ What has emerged through the Government's policy statement on MPAs and displaced fishing, however, is some broad guidelines to structural adjustment, indicating a preference for market-based adjustments, and a commitment to assess cases on a case-by-case basis.⁴⁴¹ There is a certain level of distrust by the fishing industry of the Government's motives. Some believe that if the Government had a choice between paying compensation for displaced effort and/or reductions in TACs for quota managed fisheries and reducing the 'no-take' component of an MPA, they would opt for a reduction in the 'no-take' area to avoid paying out compensation.⁴⁴² From a Government perspective, they were unlikely to ever develop a *detailed* Structural Adjustment Policy because there are so many variables governing the impact that any displacement of effort will actually have.

In some cases it is most likely that impacts will be short-lived, but will involve some additional costs or reductions in income, hence the development of the MPA and displaced fishing policy statement.⁴⁴³ Decisions with respect to any assistance given will still be on a case-by-case basis depending on a range of things such as if it will impact: the profitability of the individual; the sustainability of the fish stock; or if it will require some effort reduction. The DEH are pushing for the amalgamation of MPAs with spatial closures for overfished fisheries under the guise of the strategic assessments, as adjustment does not need to be paid out for spatial closures under the FMA.⁴⁴⁴ Fisheries are pushing for the two processes to be separated out, especially since they are running to very different timeframes, with MPAs in the SERMP region to be in place by the end of 2005 and spatial closures within three years. It is interesting to note that while this debate has been going on with commercial fishers, recreational fishers are still struggling to prove their value as a sector and 'structural adjustment' is unlikely to extend to this valuable sector, as has proven the case in the states.⁴⁴⁵

Regional marine planning is inadvertently causing conflicts between fisheries and other users, such as the petroleum industry and conservation groups. For example,⁴⁴⁶ the petroleum industry is undertaking a lot of exploration and seismic surveying in the Otways area. Regional marine planning has highlighted the concerns over the interaction of these

⁴⁴⁰ From interview with subject EY71.

⁴⁴¹ Australian Government. (2004). "Marine Protected Areas and Displaced Fishing: A Policy Statement." Canberra: DEH. <http://www.deh.gov.au/coasts/mpa/displaced-fishing.html> [Access date: 4 February 2004].

⁴⁴² From interview with subject EY71.

⁴⁴³ From interview with subject HK01.

⁴⁴⁴ From interviews with subject HK01 and FM66.

⁴⁴⁵ From interview with subject FO33.

⁴⁴⁶ From interview with subject BS82.

surveys with whale migration patterns through the area and conservationists' demands that the seismic operations cease in those months that whales are found to be moving through. This has effectively limited seismic activity to operate in the months of October and November to minimise this interaction. This period is, however, one of the most sensitive times for Rock Lobster with respect to production and hence gear interactions. So what has eventuated is a three-fold conflict that would have been easily resolved if all parties had been identified and engaged from the onset. Regional marine planning is value adding to the petroleum industry in terms of facilitating long standing conflicts and misunderstandings of the industry's operations. This has led to improved relations with traditional arch enemies, such as conservation groups.

3.3.5 *Type V – Philosophical issues*

Philosophical conflicts arise from inherent differences in the belief systems of stakeholders. The most obvious philosophical conflict relating to the fishing industry is that with extreme conservationists who believe that all life should be conserved and that we have no right to take the life of any living thing, especially for economic benefit. The balance to this argument is that the fishing industry theoretically only takes from the environment what is sustainable for ecosystem processes to survive. The polarisation of this fundamental debate is illustrative of the difficulties presented to resource use managers, which need to carefully balance stakeholder interests for the benefit of all Australians and the well-being of the environment.

The RMP process is still in early development and some concerns have been raised over the potential of RMP to dictate future research and management efforts and requirements in sectors such as fisheries. As a result of these concerns and the relative inexperience of the NOO with respect to managing sectoral interests, the NOO has met with resistance from current sectoral management agencies, such as fisheries. These agencies have the additional advantage of hindsight and historical knowledge of both the governance arrangements and the industry. However, there is also argument for a non-biased assessment through the RMP process of where efforts need to be and should be made.

3.4 Summary

This chapter concludes Part II of the thesis, which describes the current oceans and fisheries management arrangements in Australia and their capacity to incorporate integration and conflict management as reflected in the Commonwealth's AOP. This chapter specifically builds on the integrated oceans management analysis of the previous chapter and explores the integration capacity of Australia's Commonwealth fisheries to meet the objectives of regional marine planning. From this analysis, it is evident that the independent nature of the statutory authority for Commonwealth fisheries management currently lends itself to a low capacity for integrated management with other sectors and within fisheries. Initiatives such as regional marine planning and those under the Commonwealth Fisheries Policy Review have brought these inadequacies to light and the current Government is moving to address issues such as intra-sectoral resource sharing and cross-sectoral coordination. Likewise, the many inherent conflicts in fisheries are being addressed by the Government, generally through broader stakeholder participation in line with the broader context of fisheries impacts in the regional marine planning process.

Part III of the thesis will address international and other natural resource management developments for counterfactual analysis with the integration of fisheries management under the Australian regional marine planning process. The following chapter will address oceans policy and fisheries management developments in Canada, the USA, New Zealand, the European Union and Iceland. It is anticipated that these international experiences will offer some insights into the practical application of integration and conflict management in government policy.

PART III:

COMPARATIVE ANALYSIS

CHAPTER 4: INTERNATIONAL DEVELOPMENTS IN INTEGRATED POLICY

Effective policy development and implementation requires thorough research of the issues, effective consultation with stakeholders and management agencies, an analysis of the work already underway on the topic, a sound understanding of legislation and government policy and ongoing working relations with those involved in the process. In order to reduce the learning time involved with policy transfer, policy makers often turn to international counterparts for set precedents and effective management strategies. This chapter explores international experience in the development and implementation of fisheries and oceans management in order to extrapolate some lessons to inform the Australian processes. While this chapter broadly addresses issues as raised in the framework of analysis, it does not explicitly analyse each country's capacity for incorporating integration and conflict management. Comparisons can be difficult given the variance of underlying factors, such as political systems, government priorities and economic pressures, that affect oceans management. This data will therefore be used to better inform Australian initiatives rather than concentrating on direct comparisons.

Integrated oceans management, as it relates to the coordination of traditionally sectoral interests, is a relatively new concept, but several nations are endeavouring to deal with the challenges arising from implementation of this approach. Australia, although somewhat a world leader with respect to implementing integrated fisheries and oceans management, can benefit from the practical experience of these other nations. Canada has been included in this study as it has a similar political system to Australia, but also for its legislative approach to integrated oceans management that contrasts Australia's policy development approach. The USA has the same maritime delineation between state and federal jurisdictions as Australia and, although having a different political system, has approached integrated management regionally, in much the same way as Australia is proposing through regional marine planning. The USA has managed fisheries on a regional and inclusive basis for several years, and thus can provide valuable insights into the co-management approach for fisheries.

New Zealand, also with a different political system, is developing an Oceans Policy. Although progress is slow, their consultation process appears quite advanced. New Zealand has also faced many challenges with indigenous fishers and has implemented innovative

approaches to fisheries allocation and management. The European Union, although having a questionable reputation with respect to the sustainable management of its fisheries resources, provides insights into the development of sustainable and integrated oceans management within a supra national political entity, which theoretically reflects similar issues as the Australian jurisdictional divisions between states and the Commonwealth. Iceland was chosen for its advanced market-based fisheries management system and is used as a comparator with Australia's co-management approach as the latter moves towards adopting a more market-based system. The Iceland experience provides opportunity to explore adequacy of both market-based systems and co-management approaches in rising to the challenges of integrated oceans management.

4.1 Canada

4.1.1 Canada's oceans management

In 1987 the federal Department of Fisheries and Oceans (DFO) published the *Oceans Policy for Canada* document.⁴⁴⁷ This document highlighted the need for Canada to develop an integrated management strategy regarding marine resource exploitation, since the declaration of the 200nm EEZ. This initiative, however, failed for a number of reasons. There was a lack of a dedicated ocean planning department. Although DFO was dedicated the lead agency, it left several prominent departments making their own, often overlapping policies.⁴⁴⁸ This was particularly evident in the summary of the 1987 policy initiative, indicating that 14 federal departments had been involved in 75 ocean-related programs.⁴⁴⁹ The focus of the DFO at the time was also on the rapid decline in fish stocks that was becoming apparent, coupled with a dramatic increase in unemployment rates, hence higher pressure on the Government, especially in the east-coast communities. The rise in illegal fishing and illegal imports and exports was matched by a relatively inadequate monitoring and enforcement regime, as evident in the turbot 'war' in 1995.⁴⁵⁰ The document also failed to address the issue of maritime security. The demise of the Soviet Union, however, reduced the threat from the Arctic. Coupled with the change in personnel of the DFO and departmental cuts, the oceans policy soon failed due to a lack of consistency and support.⁴⁵¹

⁴⁴⁷ Day, D. (1995). "Public policy and ocean management in Canada." *Marine Policy*, **19** (4): 251-256.

⁴⁴⁸ Mitchell, C.L. (1998). "Sustainable oceans development: the Canadian approach." *Marine Policy*, **22** (4-5): 393-412.

⁴⁴⁹ Crickard, F. (1995). "Canada's ocean and maritime security. A strategic forecast." *Marine Policy*, **19** (4): 335-342.

⁴⁵⁰ McCay, B.J. and Finlayson, A.C. (1995). "The political ecology of crisis and institutional change: The case of the Northern cod." *Annual Meetings of the American Anthropological Association*. <http://arcticcircle.uconn.edu/NatResources/cod/mckay.html>

⁴⁵¹ Day (1995).

In November 1994 a Vision Paper for a National Oceans Management Strategy was released, bringing the idea of an integrated management system once again to the forefront of the federal policy regime.⁴⁵² There were five elements to this proposed strategy:

1. the conservation and protection of the ocean's environment;
2. a management framework for the Sustainable Development (SD) of renewable and non-renewable resources;
3. information sharing between science, environmental groups and management;
4. sovereign rights; and
5. a legal framework to support the strategy.⁴⁵³

In an attempt to overcome some of the fragmentation that led to the demise of the 1987 *Oceans Policy for Canada*, the Canadian Coast Guard was merged into the DFO to strengthen DFO as the lead agency for oceans policy development.⁴⁵⁴

On 31 January 1997 *Canada's Oceans Act* (COA) became law.⁴⁵⁵ The *Oceans Act* is based on the implementation of a national Oceans Management Strategy (OMS), as first introduced in 1994, to support the integrated legislative approach to cross-sectoral oceans management outlined in COA.⁴⁵⁶ Under the OMS, three primary legislative frameworks are written into the Act. These are for the establishment of:

- a National System of Marine Protected Areas (MPAs) in accordance with the Global Network of MPAs proposed at the *Convention on Biological Diversity 1992*;
- an Integrated Management Plan (IMP) for any activities in, or affecting Canada's oceans; and
- the development and enforcement of Marine Environmental Quality (MEQ) guidelines, criteria and standards.⁴⁵⁷

In early 2000 the Minister of Fisheries and Oceans (the Minister) announced the appointment of two Ministerial Oceans Ambassadors for Canada – Dr. Art Hanson and Mr. Geoff Holland – to advance the principles and approaches of oceans management called for in COA.⁴⁵⁸ On 8 June 2000 the Honourable Herb Dhaliwal (Minister of Fisheries and Oceans) announced the formation of the Minister's Advisory Council on Oceans (MACO) to assist

⁴⁵² Swan, J. (1996). "Canadian Oceans Policy and UNCED." Chapter 3. In: Kriwoken, L., Haward, M., VanderZwaag, D. and Davis, B. (eds.), *Oceans Law and Policy in the post-UNCED era: Australian and Canadian Perspectives*. London: Kluwer Law International: 41-58.

⁴⁵³ Ibid.

⁴⁵⁴ Mitchell (1998).

⁴⁵⁵ Environment Canada. (1999). "Canada's Oceans." <http://www.ec.gc.ca/agenda21/99/oceans.html>

⁴⁵⁶ Canadian Government. (1997). "Oceans Act." <http://www.laws.justice.gc.ca/en/O-2.4/text.html>

⁴⁵⁷ Environment Canada (1999) "Canada's Oceans."

⁴⁵⁸ Oceans Canada. (2001). "Oceans Canada." <http://www.oceanscanada.com>

the Minister in providing leadership in the sustainable development and integrated governance of Canada's oceans.⁴⁵⁹ MACO consists of seven members, chosen by the Minister for their expertise, merit, interests and standing in the community, to stand for a period of up to three years.⁴⁶⁰ MACO meets at least quarterly with the Ministers and/or senior officials of DFO, which also provides secretariat support to the MACO.

For an integrated approach to ecologically sustainable development of the oceans, the Canadian Government also recognised the need for multidisciplinary and interdisciplinary research. Therefore in February 2001, the results of the Ocean Management National Research Network Initiative were announced. This Initiative awarded CAN\$1.14 million over three years to new research devoted to developing sustainability within oceans management.⁴⁶¹

Canada's Oceans Strategy (COS) was released on 12 July 2002, five years after the initial commitment for an OMS was made.⁴⁶² COS is a national strategy designed for the management of estuarine, coastal and marine ecosystems in Canadian waters.⁴⁶³ COS is based on the guiding principles⁴⁶⁴ of sustainable development, integrated management and the precautionary approach with an overarching goal:

to ensure healthy, safe and prosperous oceans for the benefit of current and future generations of Canadians.⁴⁶⁵

COS establishes three policy objectives and sets the strategic direction for federal initiatives, either to be developed or already in place, to support the implementation of each of these objectives over the next four years.⁴⁶⁶

⁴⁵⁹ Oceans Canada. (2001).

⁴⁶⁰ Foster, E., Haward, M. and Coffen-Smout, S. "Implementing integrated oceans management: Australia's South East Regional Marine Plan (SERMP) Process and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." *Marine Policy*, in press. (see Appendix One for signed permission forms).

⁴⁶¹ Critchley, J. (2001). "Ocean Management National Research Network Initiative." *Social Sciences and Humanities Research Council of Canada (SSHRC)*.
http://www.sshrc.ca/english/programinfo/grantsguide/ocean_management.html

⁴⁶² Chircop, A. and Hildebrand, L. (in press). "Beyond the Buzzwords: A Perspective on Integrated Coastal and Ocean Management in Canada." In: Rothwell, D.R. and VanderZwaag, D.L. (eds.). *Towards Principled Oceans Governance: Australian and Canadian Approaches and Challenges*. Routledge Ocean Management and Policy Series; and
 Fisheries and Oceans Canada. (2002). <http://www.dfo-mpo.gc.ca/oceanscanada/>

⁴⁶³ Foster, Haward and Coffen-Smout: *in press*.

⁴⁶⁴ Oceans Act. (1996): s30.

⁴⁶⁵ Fisheries and Oceans Canada. (2002). <http://www.dfo-mpo.gc.ca/oceanscanada/>

⁴⁶⁶ Ibid.

The three policy objectives identified in COS are:

- *understanding and protecting the marine environment* – it is recognised that science plays a big part in our understanding of the marine environment and is essential in underpinning integrated management practices. Emphasis in this objective is placed on the development of MEQ guidelines and designation of MPAs through the development of IMPs;
- *supporting sustainable economic opportunities* – one of the key goals, for example, is for the conservation and sustainable use of fisheries resources and the development of the aquaculture industry. Goals for other industries and stakeholders are also highlighted as part of this policy objective; and
- *international leadership* – evident through leadership in the United Nations Fish Stocks Agreement.⁴⁶⁷

“COS is advancing oceans governance in three main areas. First is the development of new and enhanced institutional governance mechanisms by the Federal Government to promote coordinated and collaborative oceans management across levels of Federal Government and between other levels of government. This will be done through the establishment of committees, management boards and information sharing. COS is also advancing integrated oceans governance through the development of Integrated Management planning that engages all stakeholders in the planning and management of all ocean activities. Finally, through the COS, it is recognised that by promoting a sense of stewardship through public awareness, the community will develop a sense of pride and ownership that will aid compliance and enforcement in oceans governance.”⁴⁶⁸

The COS companion document, *Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada* (the National IM Framework), provides the national structure and guidance for the development of regional ocean management and planning processes.⁴⁶⁹ The development of IMPs reinforces the need for nested geographic scales. The two scales defined in the National IM Framework are:

- Large Ocean Management Areas (LOMAs) – these extend from the coastline to the limits of the 200nm EEZ, with boundaries based on ecological considerations and management units; and

⁴⁶⁷ Foster, Haward and Coffen-Smout: *in press*.

⁴⁶⁸ Ibid.

⁴⁶⁹ Ibid.

- Coastal Management Areas (CMAs – estuarine/inshore) – these are subdivisions of LOMAs where smaller scale management and planning requirements are identified.⁴⁷⁰

“Overlaying this framework of geographic scales is the network of existing planning and management zones relating to ocean management and use in the management area. These zones are generally sectoral in nature and can be categorised into one of four areas: (1) intensive use areas; (2) general use areas; (3) special management areas; and (4) protected areas. It is important that any IMP ensures these zoning arrangements are adequately coordinated across the LOMA to ensure cumulative effects and contradictory management arrangements are monitored and managed accordingly.”⁴⁷¹

The first integrated management pilot project based on a LOMA, established under the auspices of the *Oceans Act*, was the Eastern Scotian Shelf Integrated Management (ESSIM) Project. This project was announced on 3 December 1998 and therefore preceded the release of the National IM Framework, highlighting Canada’s ‘learning-by-doing’ approach to integrated oceans management.⁴⁷² Prior to this, however, there were a few Coastal IMPs already in place or in the making (for example, the Cascapedia Bay IMP and the St Lawrence Upper North Shore IMP).⁴⁷³ The development of the British Columbia Central Coast IMP means that there are now two projects based on LOMAs as specified in COA. Unlike the IMPs, however, there were no MPA Projects in force prior to the implementation of COA.⁴⁷⁴ There is now one designated MPA – the Endeavour Hydrothermal Vents – and 10 Areas of Interest based mainly around Newfoundland, the Northwest Atlantic Fisheries Organisation (NAFO) area and the southern Pacific area of the east coast.⁴⁷⁵

4.1.2 *Canada’s fisheries management*

In Canada the fishing industry is divided into the Atlantic and Pacific fisheries, each managed in accordance with the specific division of the industry relative to the region. The early 1980s saw these fisheries in crisis. A series of reports were commissioned by the DFO to determine possible management strategies to combat the demise of the fishing industry. In response to concerns raised in these reports, the Federal Government devised a series of

⁴⁷⁰ Fisheries and Oceans Canada. (2002). “Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada.” Ottawa: Oceans Directorate.

⁴⁷¹ Foster, Haward and Coffen-Smout: *in press*

⁴⁷² Oceans Canada (2001) “Oceans Canada.”

⁴⁷³ Department of Fisheries and Oceans. (2001). “OPAT.” http://canoceans.dfo-mpo.gc.ca/opat_public.asp

⁴⁷⁴ *Ibid.*

⁴⁷⁵ *Ibid.*

legislative changes. The most prominent change was the 1985 revision of the *Fisheries Act* of 1970. The revised Act allows for cabinet control over licenses and leases, 'fish habitat' protection, pollution management and liability clauses.⁴⁷⁶ Foreign fishing is controlled under the auspices of the *Coastal Fisheries Protection Act* of 1985. Simultaneously, the provincial states and regional management organisations (such as NAFO) have been implementing their own policies in the relevant areas.

The Canadian Federal Government, through Fisheries and Oceans Canada (DFO)⁴⁷⁷, is responsible for the preparation and implementation of legislation and regulations relating to national fisheries management plans and allocation processes.⁴⁷⁸ The provinces and territories are responsible for legislation and regulations related to fish habitat, programs and initiatives relating to the processing sector, provincial-territorial licensing and fisheries development initiatives.⁴⁷⁹

DFO is responsible for, amongst other things, the day-to-day management of Canada's fisheries resources. DFO's vision is for:

safe, healthy, productive waters and aquatic ecosystems, for the benefit of present and future generations, by maintaining the highest possible standards of:

- ♦ service to Canadians;
- ♦ marine safety and environmental protection;
- ♦ scientific excellence; and
- ♦ conservation and sustainable resource use.⁴⁸⁰

On 30 June 1999 the Federal, provincial and territorial governments formed the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) as a means of fostering cooperation and coordination across jurisdictional boundaries on fisheries issues of national interest.⁴⁸¹ The CCFAM consists of the Minister responsible for fisheries and aquaculture issues from each government. The CCFAM is governed by nine principles of cooperation and six primary objectives relating to the coordination of public policy objectives, aquaculture issues, information sharing, policy streamlining and the development of a

⁴⁷⁶ Canadian Government. (1997). "Oceans Act." <http://www.laws.justice.gc.ca/en/O-2.4/text.html>; and Meaney, J. (1992). "Federal fisheries law and policy: Controls over the harvesting sector." Chapter 2. In: VanderZwaag, D. *Canadian Ocean Law and Policy*. Toronto: Buttersworth: 27-48.

⁴⁷⁷ Formerly the Department of Fisheries and Oceans.

⁴⁷⁸ Governments of Canada. (1999). "Agreement on Interjurisdictional Cooperation with respect to Fisheries and Aquaculture." 30 June 1999.

⁴⁷⁹ Ibid.

⁴⁸⁰ Fisheries and Oceans Canada. (2004). "A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast." Ottawa: Communications Branch: 2.

⁴⁸¹ Governments of Canada (1999) "Agreement on Interjurisdictional..."

national approach to international issues.⁴⁸² One of the objectives of the CCFAM also relates to the development of close links with other Ministers' Councils on matters of related responsibility, thus offering opportunity for this national body to also address cross-sectoral issues as they may relate to national fisheries management.

The *Framework and Guidelines for Implementing the Co-Management Approach* outlines DFO's commitment towards decentralised management in appropriate fisheries through the establishment of Integrated Fisheries Management Plans (IFMPs) and Joint Project Agreements (JPAs).⁴⁸³ The primary goal of IFMPs is to establish the planning framework for the conservation and sustainable use of fisheries resources and the process by which a given fishery will be managed for the duration of the plan.⁴⁸⁴ As a management instrument, IFMPs offer extensive information on the fishery pertaining to long- (multi-year) and short- (annual) term management objectives and criteria for evaluating performance at the end of the fishing season. IFMPs offer enhanced transparency, building on existing advisory approaches to management in a five-step process. They also enhance opportunities for internal integration within DFO between all potentially impacted sectors. IFMPs are, however, non-binding and should only describe the fishery, leaving binding licence conditions to reflect the activities in the plan. The content of the IFMP should include, amongst other things:

- an overview of the fishery, including environmental and ecosystem relationships;
- management, consultation and enforcement arrangements;
- links with other planning initiatives and COA;
- the specific and long-term objectives for the fishery with measurable indicators or criteria for performance review; and
- financial responsibilities.⁴⁸⁵

The amount of detail required in IFMPs is in excess of conventional management plans and incorporates cross-jurisdictional, cross-sectoral and intra-sectoral issues as points of consideration for the management of the fishery. This illustrates Canada's commitment to integration through the ecosystem-based management of its fisheries. The limited resources in time and money available for bureaucrats to compile this information, however, coupled with the non-binding nature of the plans compromise the effectiveness of IFMPs. JPAs are

⁴⁸² Governments of Canada (1999) "Agreement on Interjurisdictional..."

⁴⁸³ Fisheries and Oceans Canada. (1999). "Framework and Guidelines for Implementing the Co-Management Approach." Volumes I-III. <http://www.pac.dfo-mpo.gc.ca/ops/fm/IFMP/> [Access date: 17 October 2001].

⁴⁸⁴ Fisheries and Oceans Canada. (1999). "Framework and Guidelines for Implementing the Co-Management Approach." Volume II: Integrated Fisheries Management Plans. http://www.pac.dfo-mpo.gc.ca/ops/fm/IFMP/Guidelines_2.PDF - January 1999. [Access date: 17 October 2001].

⁴⁸⁵ Ibid.

used to formalise cooperative activities between DFO and resource users. These arrangements can enhance the effectiveness of IFMPs through voluntary and often short-term legally binding agreements.⁴⁸⁶

4.1.2.1 Canada's Atlantic coast fisheries

The Atlantic east-coast fishery is governed by the *Atlantic Fishery Regulations* of 1985.⁴⁸⁷ These regulations place input restrictions on mesh size, gear sizes, gear types, etc and implement the DFO policy initiatives of the time. The Atlantic fishery, being the dominant fishery of the two Canadian fisheries, is primarily subdivided by inshore – offshore disputes.⁴⁸⁸ The inshore, or community fishery, is governed by a large fleet of <35ft vessels. This fishery is often referred to as the 'social welfare fishery', because of the large number of less economical fishers that it supports. The corporate offshore fishery is very capital intensive and consists of relatively few larger vessels (>100ft) generally owned by the processors. More recently another contingency to the ongoing disputes is the emergent nearshore fleet (35-65ft) that technically has inshore vessels that rival offshore vessels in mobility.⁴⁸⁹ The groundfish harvest of the Atlantic fishery dominates, with about 45% of annual harvest, and is further subdivided with disputes between 'fixed' gear and 'mobile' gear fishers.⁴⁹⁰

Much of the Atlantic fisheries management has been influenced by the collapse of the northern cod fishery in July 1992. The closure of this fishery has been seen as a classic case of the "tragedy of the commons".⁴⁹¹ In response to concerns by inshore fishers and academic biologists over stock abundances, the DFO assigned a Task Force to investigate the Atlantic Fisheries and consequently, the Kirby Report was produced in 1982. This Report claimed that the fish stocks were well on the way to being rebuilt and predicted quota in the order of two times historical catches by the year 1987.⁴⁹² Based on this information, the numbers of fishers, the power and number of vessels and the capacity of the processing plants grew in anticipation. It soon became apparent, in the inshore fishery especially, that catches were not correlating with predictions. In fact, after an internal DFO review of the stock assessment, it

⁴⁸⁶ Fisheries and Oceans Canada. (1999). "Framework and Guidelines for Implementing the Co-Management Approach." Volume III: Joint Project Agreements. http://www.pac.dfo-mpo.gc.ca/ops/fm/IFMP/Guidelines_3.PDF - January 1999. [Access date: 17 October 2001].

⁴⁸⁷ Meaney (1992): 27-48.

⁴⁸⁸ Charles, A.T. (1992). "Canadian Fisheries: Paradigms and Policy." Chapter 1. In: VanderZwaag, D. *Canadian Ocean Law and Policy*. Toronto: Buttersworth: 1-26.

⁴⁸⁹ Ibid.

⁴⁹⁰ Ibid.

⁴⁹¹ Hardin, G. (1968). "Tragedy of the commons." *Science*, **162**: 1243-1248; and McCay and Finlayson (1995).

⁴⁹² McCay and Finlayson (1995).

was shown that stock sizes in the Kirby Report were overestimated by up to 100% and natural mortality was underestimated by up to 50%.⁴⁹³

On 2 July 1992 the then Minister for Fisheries and Oceans, John Crosbie, declared a two-year moratorium on northern cod catches. This was soon turned into a closure of the fishery when, in 1994, the stock assessment reports indicated that the stocks were in fact declining further. The impact of this closure was especially felt by the inshore fleets and will be felt for years to come as the Federal Government spends billions of dollars on a series of crisis response programs to relocate the 35,000 fishers and plant-workers that have been displaced from the industry.⁴⁹⁴ The failure of the 1987 Canadian Oceans Policy can be attributed in part to this 'cod crisis', which demanded high resources from the Federal Government to essentially realign the Atlantic fisheries.⁴⁹⁵

The primary focus of the DFO in fisheries is to rebuild stocks and maintain a sustainable fishing industry.⁴⁹⁶ As part of achieving this objective the DFO released a discussion paper in February 2001, titled *The Management of Fisheries on Canada's Atlantic Coast*, as part of its Atlantic Fisheries Policy Review (AFPR) that was launched in 1999.⁴⁹⁷ The AFPR was initiated in response to the collapse of the Atlantic groundfish, the recognition of Aboriginal rights in the Marshall ruling⁴⁹⁸ and the development of IMPs under the auspices of COA.⁴⁹⁹ The AFPR is being completed in two phases. Phase I ended with the release of the *Policy Framework for the Management of Fisheries on Canada's Atlantic Coast* (the Framework) in March 2004.⁵⁰⁰ This Framework establishes the vision for the long-term management of Atlantic fisheries:

the Atlantic fisheries will become a biologically sustainable resource supporting fisheries that:

- ♦ are robust, diverse and self-reliant;
- ♦ effectively involve all interests in appropriate fisheries management processes;
- ♦ are sustainable and economically viable, contributing to the economic base of coastal communities; and

⁴⁹³ McCay and Finlayson (1995).

⁴⁹⁴ Ibid.

⁴⁹⁵ Mitchell (1998).

⁴⁹⁶ Ibid.

⁴⁹⁷ Department of Fisheries and Oceans. (2001). "The Management of Fisheries on Canada's Atlantic Coast." [http://www.dfo-mpo.gc.ca/afpr-rppa/Discodoc_pages_e/discodoc\(full\)_e.htm](http://www.dfo-mpo.gc.ca/afpr-rppa/Discodoc_pages_e/discodoc(full)_e.htm)

⁴⁹⁸ R. v. Marshall 1999, 3SCRR456.

⁴⁹⁹ Department of Fisheries and Oceans. (2001).

⁵⁰⁰ Fisheries and Oceans Canada (2004) "A Policy Framework..."

- ♦ provide for the constitutional protection afforded Aboriginal and treaty rights and where Aboriginal and non-Aboriginal resource users work collaboratively.⁵⁰¹

To make this vision a reality, the Framework identifies two core objectives—for the conservation and sustainable use of resources and habitat and for biologically sustainable fisheries that support self-reliant and viable fisheries. The Framework also identifies two supporting objectives demanding shared stewardship that requires a stable, transparent access and allocation process.⁵⁰² The AFPR emphasises the need for decentralised management with the delegation of certain authorities or shared responsibility in a co-management arrangement with government and all marine users. The policy framework also implies that, with a shift in focus from top-down management to shared stewardship, the role of DFO will change from the day-to-day management of fisheries to one primarily concerned with developing policy, setting strategic direction and evaluating performance.⁵⁰³

The need for legislative change to the outdated *Fisheries Act* of 1985, which in its current form leaves little room for co-management, is reflected in the Framework that alludes to a delegation of certain decision-making powers to resource users.⁵⁰⁴ Due recognition is also given to concurrent processes that will impact and be impacted by actions implemented under the Framework, namely the IMP commitments under COS and those relating to aquaculture and Aboriginal and treaty policies. Phase II of the AFPR will involve the implementation of the Framework into the practical management of the Atlantic fisheries to ensure long-term sustainability of the resource and its environment.⁵⁰⁵

The intra-sectoral capacity for integration in the Atlantic fisheries has been enhanced by the establishment of the Scotia Fundy Fishing Industry Roundtable (the Roundtable).⁵⁰⁶ The increased competition for use of ocean space, greater public awareness of marine issues and the cumulative impact of multiple-use activities on the ocean resources have been cited as the impetus for development of the Roundtable.⁵⁰⁷ The Roundtable serves to consolidate the views of the fishing industry on inter-fleet and oceans management issues and to facilitate a common strategic direction on ecosystem-based management.⁵⁰⁸ It comprises a base of 20-

⁵⁰¹ Fisheries and Oceans Canada (2004) "A Policy Framework...": 7.

⁵⁰² Ibid.

⁵⁰³ Ibid.

⁵⁰⁴ Burke, L. (2003). DFO: Personal communication – 21 August 2003.

⁵⁰⁵ Department of Fisheries and Oceans (2001) "The Management of Fisheries..."; and Fisheries and Oceans Canada (2004) "A Policy Framework..."

⁵⁰⁶ Department of Fisheries and Oceans. (2002). "Terms of Reference – Scotia Fundy Fishing Sector Roundtable." 23 January 2002.

⁵⁰⁷ Ibid.

⁵⁰⁸ Ibid.

25 members representative of the fishing industry (harvesters and processors), with meetings open to others, but stability encouraged through attendance by base members.⁵⁰⁹ As such, it is well positioned to address intra-sectoral issues and to deliver a united view on cross-sectoral oceans management issues as an effective preventative conflict management mechanism.

4.1.2.2 *Canada's Pacific coast fisheries*

The Pacific coast covers a relatively small area in comparison to the Atlantic coast and relies primarily on the salmon fishery for sustenance.⁵¹⁰ Due to the biological nature of the salmon, environmental conservation is of great importance in this fishery. Like the Gorges Bank moratorium on oil and gas exploration on the Atlantic coast, there is a moratorium on oil and gas exploration on the Pacific coast that has been in place since 1972. However, without the expanding oil and gas sector that the rest of the Atlantic coast has, there are few options for displaced Pacific coast fishers, besides land-based employment alternatives, should any reductions be imposed on the fishery. This is of consequence to the outcomes of the 1982 Pearse Commission Report, which recommended a need to reduce the number of fishers in the industry.⁵¹¹ In March 1996, the government entered into a US\$80 million buy-back scheme in an attempt to reduce the salmon fleet, hence save the fishery from potential collapse as seen in the Atlantic cod fishery.⁵¹²

The Pacific fishery is primarily subdivided according to gear selection between the gillnet fishers, the seiners and the trollers.⁵¹³ The internal conflict in this fishery is somewhat philosophical. The small-scale gill-netters argue that they are able to enhance conservation practices in comparison to the seiners, as they only target specific schools and therefore minimise by-catch. The large-scale seiners rebut by arguing that they have a higher net value. And the trollers argue that they capture the fish in their prime, before they enter the fresh water and the flesh deteriorates. Another division in the Pacific fishery lies in the conflict over quota allocation between native fishers, recreational or sport fishers and commercial fishers. This is a conflict seen in many fisheries throughout the world and has yet to be satisfactorily resolved.

⁵⁰⁹ Department of Fisheries and Oceans. (2002).

⁵¹⁰ Mitchell (1998).

⁵¹¹ Ibid.

⁵¹² Ibid.

⁵¹³ Charles (1992).

In October 1998 DFO released a Discussion Paper titled *A New Direction for Canada's Pacific Salmon Fisheries*.⁵¹⁴ This paper essentially equates to the Atlantic Fisheries Policy Review in its intent. Upon its release it was noted by the Minister of Fisheries and Oceans that it was necessary to move away from crisis management of the Pacific fisheries to a more risk-averse, conservation-based form of management.⁵¹⁵ As a consequence of this discussion paper, an independent review team was established to review the decision-making processes in the Pacific salmon fisheries.⁵¹⁶ The final report from this review team was released in May 2001. The recommendations included a framework for future management covering three areas including: salmon harvest management planning; the establishment of an allocation and licensing advisory board; and policy forums.

4.1.3 Lessons for Australia

In terms of oceans management Australia has a larger budget and scope to implement policy initiatives than Canada.⁵¹⁷ This is most evident when looking at the economic impacts of the 'cod crisis' and the lack of authority to manage multi-departmental oceans management without legislative reform, factors that led to Canada's previously failed attempts to implement oceans policy. There are, however, a number of lessons that can be learnt from the Canadian experience, some of which are already reflected in Australian policy and management, such as the 'areas of interest' concept adopted for evaluating MPA designations. Canada is facing similar difficulties in getting support outside DFO for IMPs as Australia is facing with state support for RMPs. The common ground here is the lack of financial commitment for non-lead agencies/departments/governments to implement any actions arising from the development of centrally administered oceans management.

Canada's oceans management, albeit lagging behind Australia, has a much clearer process due to their 'learning-by-doing' approach. The IM Framework establishes the ground rules for IMPs while maintaining flexibility to adapt to any of Canada's vast and distinctive oceanic regions. Australia's regions are arguably less distinct, yet there is no overall guiding framework for the development of RMPs. This has caused, and will likely continue to cause, anxiety and concern amongst stakeholders, unsure of the purpose and impact of this process in each region.

⁵¹⁴ Department of Fisheries and Oceans. (1998). "A new direction for Canada's Pacific salmon fisheries." <http://www-comm.pac.dfo-mpo.gc.ca/english/publications/alloc/st9808e.htm>

⁵¹⁵ Ibid.

⁵¹⁶ Dragseth, C. and Maloney, M. (2001). "Minister releases report on improved decision-making in the Pacific salmon fishery." *Department of Fisheries and Oceans*. <http://www-comm.pac.dfo-mgo.gc.ca/english/release/p-releas/2001/nr050e.htm>

⁵¹⁷ Coffen-Smout, S. (2003). DFO: Personal communication – 25 August 2003.

Although Canada only has a few IMPs in process at the time of writing, Canada's objectives-based fisheries management incorporates ecosystem-based management principles, including social and economic objectives, based on sound risk management processes. It is arguable how effective these plans are considering the continued demise of fish stocks in Canada, but there is a clear recognition and effort towards intra-sectoral and cross-sectoral integration of the fishery in the IFMP. Australia is moving towards this goal but has yet to incorporate these integration aspects of sustainability.

Another significant lesson from the Canadian experience is the proposed legislative commitment towards co-management of their fisheries, with the devolution of certain decision-making powers to the resource users themselves. The Australian form of 'co-management' is weaker, giving only certain resource users some advisory powers but no real authority to make hard decisions about their ongoing welfare. To obtain a true sense of stewardship for the oceans and its resources it is important to give users a sense of ownership over the decision-making process. This should be coupled with strong accountability mechanisms and overall auditing by government, which manages resources on behalf of the public, but there is capacity for the delegation of certain authorities beyond that of Australian MACs.

Canada sets an interesting precedent for preventative conflict management by encouraging industry compliance with policy and management measures through a commitment to positive incentives in the first instance, rather than negative enforcement measures. This is most evident in the AFPR policy framework that explicitly states that "positive incentives must be sought for compliance; with strict enforcement measures only for those who do not chose to voluntarily comply with the established regulations".⁵¹⁸ Australia's emphasis, as is the case with many other nations', has been on the establishment of mitigation measures as a negative incentive for compliance. It would be advantageous to adopt the trust-building measures of the Canadians in setting explicit positive incentives for the industry to self-govern and monitor their own actions, with harsh penalties if they fail to account for their actions.

Canada has taken a proactive approach to intra-sectoral integration and conflict management through the work of the Scotia Fundy Fishing Sector Roundtable. The Roundtable enhances the industry's capacity for inter-sectoral integration and has also developed a preventative conflict management approach to inter-gear conflicts through the collective identification of potential (anticipatory) conflicts, acute (actual) conflicts and systematic (those caused by

⁵¹⁸ Fisheries and Oceans Canada (2004) "A Policy Framework...": 15.

management processes) conflicts and relevant management strategies to address these conflicts.⁵¹⁹ Australia has the opportunity to implement similar regional arrangements for its fishing industry, to consolidate regional industry views and work with industry to proactively address some of the issues raised in regional marine planning and integrated oceans management.

4.2 United States of America

4.2.1 USA's oceans management

Under the auspices of the *Marine Resources and Engineering Act* of 1966, the Marine Sciences Council and the Commission on Marine Sciences, Engineering and Resources (COMSER, later known as the Stratton Commission) were established to make recommendations for a national marine science program to assist in coordinating marine science activities in the US.⁵²⁰ COMSER, under the guidance of Julius Stratton, produced a report on ocean governance in the US, which stipulated that current governance was fragmented and there was a need for reform. The Stratton report is essentially the blueprint for the US oceans policy and many unsuccessful attempts were made at creating a second such commission to deal with exactly this issue.⁵²¹ The Stratton report, *Our Nation and the Sea*, was at the international forefront of oceans policy and established the National Oceanic & Atmospheric Administration (NOAA) – a federal oceans agency assigned the task of coordinating US research efforts.⁵²²

Perhaps the most significant outcome of the Stratton Commission was the drafting of the *Coastal Zone Management Act* in 1972 and the subsequent landmark laws that soon followed. Under the auspices of the *Coastal Zone Management Act*, the Coastal Zone Management (CZM) Program was established as part of NOAA, dealing with such things as non-point source pollution control and coastal energy impacts.⁵²³ As of the beginning of 1999, 97% of the US coastline was under the CZM Program with only Illinois remaining to

⁵¹⁹ Information collected at the DFO/Industry Roundtable meeting – Class of '47. 26 August 2003. Dartmouth: Marine Ports.

⁵²⁰ US Commission on Ocean Policy. (2002). "Developing a National Ocean Policy." Mid-term Report of the US Commission on Ocean Policy. September 2002.

⁵²¹ Bondareff, J.M. (1994). "Congress, reform and oceans policy." *Coastal Management*, 22: 147-161; and
Cicin-Sain, B. and Knecht, R.W. (2000). "The future of U.S. Ocean Policy." Washington: Island Press.

⁵²² Kiessling, I. (1998). "Integrated Marine Management of the E.E.Z." PhD Thesis. Hobart: University of Tasmania; and
US Commission on Ocean Policy (2002). "Developing a National Ocean Policy."

⁵²³ Kiessling (1998).

sign on.⁵²⁴ The federal funding initiative for this program was approximately US\$50 million per year in 1999.⁵²⁵ In conjunction with the CZM Program, a series of other programs were established under this Act, including the National Estuarine Research Reserve System, the National Marine Sanctuary Program and the Ocean Minerals and Thermal Energy Program.⁵²⁶ These all contribute to a more holistic management arrangement of the coastal zone.

The 1980s saw in the 'New Federalism' under the Reagan administration, in which there was an administrative policy shift of responsibility from Federal to state government, often without the accompanying funding.⁵²⁷ The Reagan administration had an antigovernment philosophy, believing the Federal Government was too big with too much regulation, especially environmental regulation of energy development activities.⁵²⁸ The 1980s hence saw little legislative development and an increased focus on deregulation and implementation issues. Following federal funding cutbacks in the 1980s, US ocean use and policy initiatives were developed sporadically and by some of the more proactive states.⁵²⁹ The main areas of growth for management of state jurisdiction out to 3 miles included: coastal zone management; oil pollution control; outer continental oil and gas development; national marine sanctuaries; and fisheries management.⁵³⁰ Many of these state initiatives were developed in response to public demand or, as in the case of the Exxon Valdez incident in 1989, state concern that influenced federal decision-making. In response to the shift of responsibility, states began to produce their own policy reports starting with North Carolina, then Oregon and Washington.

To date, states have taken different approaches to the application of oceans policy in their territorial waters. Oregon has by far developed the most sophisticated multi-tiered integration policy. This is supported by legislation in a top-down form of governance, crossing jurisdictions to incorporate federal waters in an ocean stewardship zone, 30-80 miles offshore.⁵³¹ States such as North Carolina and Maine have enhanced their existing frameworks, which led to the development of an oceans policy document.⁵³² Carolina and

⁵²⁴ Cicin-Sain and Knecht (2000).

⁵²⁵ Ibid.

⁵²⁶ Cicin-Sain and Knecht (2000); and Kiessling (1998).

⁵²⁷ Cicin-Sain and Knecht (2000); and Hershman, M.J. (1996). "Ocean management policy development in subnational units of government: examples from the United States." *Ocean & Coastal Management*, 31 (1): 25-40.

⁵²⁸ Cicin-Sain and Knecht (2000).

⁵²⁹ Kiessling (1998).

⁵³⁰ Hershman (1996).

⁵³¹ Cicin-Sain and Knecht (2000); and Hershman (1996).

⁵³² Hershman (1996).

Hawaii attempted to streamline their existing programs and harmonise policies rather than writing new ones.⁵³³ A major driving force for state oceans policy making was the federal lease sales of OCS oil and gas, which in the early 1990s was delayed for a decade, hence alleviating pressure from the states.⁵³⁴ Interestingly, fisheries have remained protected within the state oceans policies.

In 1983 the same year as the US claimed an EEZ, the Reagan Administration announced the development of a national oceans policy.⁵³⁵ It soon became apparent, however, that without a central focused body dedicated to oceans policy, the convoluted politics of Congress would see the demise of this initiative.⁵³⁶ Despite this observation, Congress was reluctant to establish a centralised oceans policy body for fear of opening the 'Pandora's box' of the US' failure to sign the LOSC agreement and due to the lack of support for creating yet another 'half-baked' advisory committee.⁵³⁷ Positive outcomes for oceans policy issues arose in the 100th Congress, although the integrated management of these outcomes in an all-encompassing oceans policy remained a contentious issue.

On 24 September 1997, US Senator Fritz Hollings introduced the *Oceans Act* to Congress, a radically different approach to the failed introduction of an oceans policy. The Act proposed that federal activities be directed towards a common goal. To assist in this primary focus, the Act directs the establishment of a 16 member Commission on Oceans Policy to make recommendations for a coordinated and comprehensive national ocean policy and for a Federal National Ocean Council (NOC) to advise the President.⁵³⁸ On 14 November 1997, the *Oceans Act* passed the Senate, but the House of Representatives would not pass it due to reservations about the divisions of power under the new policy and the proposed administrative arrangements.

In addition, towards this move for an Oceans Act, in late 1997 to early 1998, 12 teams were each assigned an ocean or coastal issue to write a report on the US developments.⁵³⁹ The findings of these reports, the YOTO (Year of the Oceans) papers, are evident in some of the programs now in existence. Another major initiative in the YOTO (1998) was a National Ocean Conference held in Monterey. At this conference, President Clinton offered nine new initiatives for oceans governance with a US\$224 million budget for implementation.⁵⁴⁰

⁵³³ Hershman (1996).

⁵³⁴ Ibid.

⁵³⁵ Kiessling (1998).

⁵³⁶ Bondareff (1994).

⁵³⁷ Ibid.

⁵³⁸ Kiessling (1998).

⁵³⁹ Cicin-Sain and Knecht (2000).

⁵⁴⁰ Ibid.

These initiatives included issues such as, extending the moratoria on offshore drilling, building sustainable fisheries, protecting coral reefs and ratifying the 1982 LOSC, to name a few.⁵⁴¹ What were not included in any of these reports were the ecological values of the oceans as fish habitats, carbon sinks, etc.

The *Oceans Act* was passed by Senate on 26 June 2000 after several years debate and some additional amendments, including the exclusion of integration in its strictest sense and the limitation of the administrative powers of the NOC to that of implementation.⁵⁴² The US Congress passed this legislation on 25 July 2000,⁵⁴³ with provisions to establish a Commission on Ocean Policy charged with “studying and re-evaluating the nation’s laws and policies regarding oceans and coasts”.⁵⁴⁴

The final Act, effective as of 20 January 2001, incorporates the particulars of the US Commission on Ocean Policy (the Commission) and the guiding principles for establishing a National Ocean Policy.⁵⁴⁵ This legislation is slightly different from that passed in Canada. They are both forms of enabling legislation, but the USA *Oceans Act* provides minimal guidance for practical integrated oceans management and planning, rather it defines the role of the Commission and what it should include in its National Oceans Report to the President and Congress. The legislation outlines the particulars of the Commission’s membership and functions and authorises US\$8.5 million for the Commission to carry out its work.⁵⁴⁶ It is anticipated that upon receipt of the final National Oceans Report (the Report), the President, in consultation with the states, will respond to these recommendations within 120 days and make a statement regarding the future development of a National Ocean Policy.⁵⁴⁷

Since the Commission began its work in September 2001 it has held 15 public meetings, with an additional 17 site visits around the country, hearing from around 440 presenters concerned about the future of the ocean and coastal environment.⁵⁴⁸ Four Working Groups of the Commission were established to deal with the key issues raised in these meetings within specific areas of focus pertaining to: Governance; Stewardship; Research, Education

⁵⁴¹ Cicin-Sain and Knecht (2000).

⁵⁴² 106th US Congress. (2000). “Oceans Act of 2000.” S.2327.

⁵⁴³ The Oceans Act of 2000 was signed into law by the President on 7 August 2000.

⁵⁴⁴ Edie Newsroom. (2000). “National Oceans Commission gets the go-ahead from US Congress.” <http://www.edie.net/news/Archive/3025.html>; and 106th US Congress (2000).

⁵⁴⁵ 106th US Congress (2000).

⁵⁴⁶ US Commission on Ocean Policy. (2003). “Information on the Oceans Act of 2000.” <http://www.oceancommission.gov> [Access date: 8 April 2004].

⁵⁴⁷ US Commission on Ocean Policy. (2002). “Developing a National Ocean Policy.” Mid-term Report of the US Commission on Ocean Policy. September 2002.

⁵⁴⁸ US Commission on Ocean Policy. (2004). “The US Commission on Ocean Policy.” <http://www.oceancommission.gov> [Access date: 8 April 2004].

and Marine Operations; and Investment and Implementation. Based on this fact-finding mission and options analysis presented by the Working Groups, the Preliminary Report was developed and released on 20 April 2004. After a one-month public review period the Commission will prepare a revised Final Report for submission to the President.

In accordance with the *Oceans Act*, the Final Report is to include the following reviews, assessments and recommendations:

- an assessment of facilities (people, vessels, computers, satellites);
- a review of federal activities and the cumulative effect of federal laws;
- a review of the supply and demand for ocean and coastal resources;
- a review of the relationships between federal, state and local governments and the private sector;
- a review of the opportunities for investment in new products and technologies;
- recommendations for federal legislative and institutional modification; and
- a review of the effectiveness of existing federal interagency policy coordination.⁵⁴⁹

The Commission's recommendations, as outlined in the Preliminary Report, for the institutional arrangements of a National Ocean Policy Framework are:

- a designated Assistant to the President;
- an Office of Ocean Policy in the Executive Office of the President – directed by the designated Assistant to the President to support the Office and the NOC;
- a National Ocean Council (NOC) – the central decision-making body chaired by the Assistant to the President and composed of cabinet secretaries of departments and directors of independent ocean and coastal agencies; and
- a Presidential Council of Advisors on Ocean Policy – situated within the Office and composed of coastal governors, other appropriate non-federal state, local and tribal government representatives, the private sector, research community, NGOs and watershed organisations, to provide enhanced federal leadership and coordination for the coasts and oceans.⁵⁵⁰

⁵⁴⁹ US Commission on Ocean Policy (2002) "Developing a National Ocean Policy"; and US Commission on Ocean Policy (2003) "Information on the Oceans Act of 2000"

⁵⁵⁰ US Commission on Ocean Policy. (2004). "Preliminary Report of the U.S. Commission on Ocean Policy." Governor's Draft, Washington, D.C., April 2004.

The functions of the NOC will include, but not be limited to, policy development, program implementation and reporting including:

- implementing and improving the recommendations of the Commission;
- making recommendations for federal agency reorganisation or consolidation reflecting the Commission's recommendations;
- addressing legislative redundancies and duplication and develop policies to resolve conflicts and fill in gaps;
- reviewing and assessing the progress of individual agency programs in achieving national ocean goals;
- identifying areas for interagency/cross-jurisdictional conflict resolution;
- improving interagency ocean and coastal coordination;
- guiding the development and implementation of a national ocean policy research plan, a national ocean data and information management system and a national program for the assessment of the state of ecosystems;
- creating and overseeing task groups to address specific problems;
- providing, in cooperation with the State, leadership in international affairs;
- determining appropriate ecosystem planning and management units and relevant scientific criteria; and
- periodically report on the progress of the national ocean policy through a *State of the Nation's Oceans and Coasts Report*.⁵⁵¹

The NOC would also be responsible for coordinating with relevant agencies and officials in the development of a national coastal management policy containing national coastal goals and objectives to ensure that the economic and environmental needs of the coastal areas are balanced in a sustainable manner.⁵⁵² This would involve relevant amendments to the dated *Coastal Zone Management Act* of 1972.

The proposed framework also provides for the establishment of regional ocean councils that, in conjunction with the NOC and regional ocean information programs, would develop guidance for regional ecosystem management plans addressing state/regional coordination, pollution reduction, economic development and research priorities.⁵⁵³ These regional ocean councils would not replace existing regional bodies such as the regional fisheries management councils but rather, would complement them by streamlining policies,

⁵⁵¹ US Commission on Ocean Policy (2004) "Preliminary Report..."

⁵⁵² US Commission on Ocean Policy. (2003). "Introduction of Draft Policy Options." Washington, D.C.: 2-3 April, 2003. <http://www.oceancommission.gov> [Access date: 8 April 2004].

⁵⁵³ US Commission on Ocean Policy (2004) "Preliminary Report..."

processes and programs to ensure the maintenance of economic and environmental harmony in a sustainable manner. Regional management plans would reflect regional goals that are consistent with the national goals established in the national ocean policy with associated performance objectives and measures. Regional ocean council responsibilities could involve:

- dispute resolution where interagency coordination is lacking;
- accurate delineation and feature mapping of the region;
- building public awareness to enhance a stewardship ethic of the ocean;
- facilitation of coastal and ocean science and information sharing and support; and
- applying ecosystem-based principles of the ocean policy to integrative regional plans for coastal management.⁵⁵⁴

A number of focus area panels could be established to assist the regional ocean councils resolve particular problems on the understanding that ultimate decision-making power remains with the relevant federal, state, tribal or local agency.

4.2.2 *USA's fisheries management*

The *Fishery Conservation and Management Act* (FCMA) established eight regional fisheries management councils to govern federal fisheries out to 200 miles, recognising the need for state and regional knowledge in effective fisheries management.⁵⁵⁵ Individual states manage marine fisheries in inshore and coastal waters out to 3 miles, with interstate coordination occurring through three regional interstate fishery commissions (the Atlantic, Gulf and Pacific fishery commissions).⁵⁵⁶ Initial opposition to the FCMA by commercial fishers quickly turned to support as these fishers gained dominance in the fisheries councils in the 1980s.⁵⁵⁷ Since its conception in 1976 the FCMA has undergone 12 amendments in an attempt to overcome some of the problems associated with the Act, the most recent prominent amendment being in 1996.⁵⁵⁸

⁵⁵⁴ US Commission on Ocean Policy (2003) "Introduction of Draft Policy Options"

⁵⁵⁵ Buck, E.H. (1996). "95036: Magnuson Fishery Conservation and Management Act Reauthorization." CRS Issue Brief for Congress. Washington, DC, USA: The National Council for Science and the Environment. <http://www.cnie.org/nle/mar-3.html> [Access date: 9 August 2001]; and

Cicin-Sain and Knecht (2000).

⁵⁵⁶ Buck (1996).

⁵⁵⁷ Cicin-Sain and Knecht (2000).

⁵⁵⁸ Ibid.

The 1996 Amendment received bipartisan support and the amended FCMA became known as the *Sustainable Fisheries Act* (SFA), or the *Magnuson-Stevens FCMA*.⁵⁵⁹ The *Sustainable Fisheries Act* became law on 11 October 1996.⁵⁶⁰ This Act incorporates changes to the previously amended FCMA to include provisions for science, management and conservation action by the National Marine Fisheries Service (NMFS) under the auspices of NOAA.⁵⁶¹ Through the amendments, the optimal yield for fishing became the maximum sustainable yield minus an amount determined by socio-economic and ecological considerations.⁵⁶²

Other amendments besides the prevention of overfishing, included:

- the reduction of incidental mortality and by-catch;
- the conservation of fish habitats;
- the introduction of access fees;
- the reformulation of the Fisheries Management Plan approval process; and
- the prohibition of allocating individual fishing quotas until 1 October 2000, at which time the process was to be thoroughly reviewed.⁵⁶³

The NMFS also produced a set of National Standard Guidelines (NSG) to help the eight regional fisheries management councils interpret the SFA.⁵⁶⁴ The primary aim of the NSG was to prevent overfishing while achieving optimal yield by setting standards for fishing communities, by-catch and safety at sea.⁵⁶⁵

4.2.2.1 Regional Fisheries Management Councils

Eight Regional Fisheries Management Councils (RFMCs) are charged with the management of federal US fisheries. These are the New England, Mid-Atlantic, South Atlantic, Caribbean, Gulf, Pacific, North Pacific and Western Pacific Councils.⁵⁶⁶ These Councils constitute both voting and non-voting members, reflecting the expertise and interest of the constituent states.

⁵⁵⁹ Cicin-Sain and Knecht (2000).

⁵⁶⁰ NOAA Fisheries. (2001). "Sustainable Fisheries Act." <http://www.nmfs.noaa.gov/sfa/>

⁵⁶¹ Ibid.

⁵⁶² Restrepo, V.R. and Powers, J.E. (1999). "Precautionary control rules in US fisheries management: specification and performance." *ICES Journal of Marine Science*, 56: 846-852.

⁵⁶³ Cicin-Sain and Knecht (2000).

⁵⁶⁴ Restrepo and Powers (1999).

⁵⁶⁵ Cicin-Sain and Knecht (2000); and Restrepo and Powers (1999).

⁵⁶⁶ NOAA. (1996). "Magnuson-Stevens Fishery Conservation and Management Act." Public Law 94-265. Section 302. <http://www.nefsc.noaa.gov/magact/> [Access date: 8 April 2004].

The voting members are usually appointed for a three-year term and include:

- the principal marine fishery management official from each constituent state;
- the applicable regional director of the NMFS; and
- members selected by the Secretary of Commerce for their experience, scientific expertise, or training knowledge regarding the conservation and management, or harvesting of the fishery resources in the given area.⁵⁶⁷

In the selection of members, the Secretary must ensure a fair and balanced apportionment between definitive stakeholders, namely recreational and commercial representatives, but there is no mention of any necessity to include 'other' expectant stakeholders in this "fair and balanced" apportionment.⁵⁶⁸ According to Okey (2003), this has led to an overwhelming dominance of extractive interests on the Councils who have vested interest in the fishery and are, generally speaking, more interested in short-term profit rather than intergenerational equity. Such 'industry-capture' has led to the evidential failure of US fisheries management to meet public good and long-term sustainability objectives.⁵⁶⁹ The members selected by the Secretary are taken from a list of three individuals for each available vacancy submitted by the Governor of each constituent state.⁵⁷⁰ While the sentiment of expertise-based representation is maintained, it is more often the case that fishing industry lobby groups mount self-serving campaigns on the Governor to nominate them, therefore the Secretary has only a choice of extractive users, which leads to 'industry-capture'. Although 'industry-capture' is highlighted as a significant issue in the effectiveness of these Councils, it is noteworthy that commercial and recreational interests made up 82% of the voting members of the combined Councils for the period 1990-2001, and 17% of voting members over the same period constituted 'other' interests, which is quite significant in comparison to some other international arrangements.⁵⁷¹ The problem posed by the inclusive and transparent nature of these Councils is that it can substantially slow the decision-making process, making it inefficient and unwieldy.⁵⁷²

Councils are charged with:

- the development and amendments of fishery management plans for each fishery under their jurisdiction to be submitted to the Secretary;

⁵⁶⁷ NOAA. (1996) "Magnuson-Stevens Fishery Conservation..."

⁵⁶⁸ Okey, T.A. (2003). "Membership of the eight Regional Fishery Management Councils in the United States: are special interests over-represented?" *Marine Policy*, 27: 193-206.

⁵⁶⁹ Ibid.

⁵⁷⁰ NOAA (1996) "Magnuson-Stevens Fishery Conservation..."

⁵⁷¹ Okey (2003).

⁵⁷² Miklsen, K.H. and Jentoft, S. (2001). "From user-groups to stakeholders? The public interest in fisheries management." *Marine Policy*, 25: 281-292.

- to prepare comments on any application for foreign fishing or management plans and amendments;
- conducting public hearings as and when necessary to allow all interested parties an opportunity to be heard;
- submitting periodic reports to the Secretary;
- reviewing and revising optimum yield and total allowable foreign fishing levels; and
- any other activities required to meet the functions of the Council.⁵⁷³

In carrying out its functions Councils are required to establish and maintain the following advisory bodies:

- a Scientific and Statistical Committee – to assist in the development of management plans;
- Advisory Panels – to assist in carrying out its functions; and
- a Fishing Industry Advisory Committee – to provide information and recommendations on the development of fishery management plans.⁵⁷⁴

The Secretary also may establish advisory panels of at least seven members, with a balanced representation between commercial, recreational and other interests, to assist in the collection and evaluation of information relevant to fishery management plans that apply to highly migratory species.⁵⁷⁵

A number of recommendations related to fisheries management were also made in the US Commission on Ocean Policy Preliminary Report. These recommendations include: setting harvest limits below the allowable biological catch determined by the Council's Scientific and Statistical Committee; setting deadlines for allowable catch recommendations; timely development of fisheries management plans; annual management priority needs to be submitted to the NMFS; and the development of regional bycatch reduction plans.⁵⁷⁶

4.2.3 *Lessons for Australia*

The Commission on Ocean Policy is proposing the establishment of regional ocean councils to develop, in conjunction with the NOC, regional ecosystem management plans addressing state/regional coordination, pollution reduction, economic development and research

⁵⁷³ NOAA (1996) "Magnuson-Stevens Fishery Conservation..."

⁵⁷⁴ Ibid.

⁵⁷⁵ Ibid.

⁵⁷⁶ US Commission on Ocean Policy (2004) "Preliminary Report..."

priorities.⁵⁷⁷ In retrospect, perhaps this institutional arrangement is what Australia needed to assist in the effective development of its instrumental RMPs. It is at least a potential consideration for the implementation and ongoing management of these plans. Integrated Oceans Management Advisory Councils (IOMACs) are proposed in Section 7.4.5 for the effective regional implementation of RMPs, and with other nations also considering this path, it seems quite feasible and potentially beneficial for their successful implementation. It will be of interest to watch the USA in its implementation and development of these regional councils and plans to see what challenges they face and how they overcome or pre-empt them.

The USA has developed a National CZM Program in recognition of the land-sea interconnectivity. This is an integral part of integrated oceans management and one that is yet to be adequately addressed in Australia. Many failed attempts at developing a National Coastal Policy have strewn Australia's past and are relatively insignificant when considering that Australia has not yet even integrated across maritime jurisdictions by getting the states signed on to Oceans Policy commitments.

Although a "coordinated and comprehensive framework" is one of the elements of an ocean policy agreed to by the Commission, the topical development of the process used to categorise issues remains particularly sectoral in nature. Integration is being proposed for the implementation stage, after the issues and possible policy options to address these issues have been determined for each topical area. It will be useful to examine the US approach with respect to the Australian semi-sectoral approach to determine whether any proposed legislative or institutional modifications can adequately deal with the issue of integrated oceans management, or whether it will result in simple cohesion of management practices across jurisdictional and sectoral boundaries.

RFMCs are an example of the practical application of a regional approach to management and as such provide a working example for Australia. These bodies incorporate the intra-sectoral interests of definitive and expectant stakeholders. There appears to be some 'industry-capture' of these Councils in the USA, but Australia has risen to this challenge before in the functioning of the AFMA Board. To this end Regional Fisheries Advisory Councils (RFACs), balancing recreational, indigenous, aquaculture and commercial interests is considered in Section 7.4.6. In order to address cross-sectoral interests of latent stakeholders, the development of Integrated Oceans Management Advisory Councils (IOMACs) is proposed (see Section 7.4.5), rather than the primary advisory body being all-

⁵⁷⁷ US Commission on Ocean Policy (2003) "Introduction of Draft Policy Options"

inclusive and somewhat inefficient and unwieldy as experienced by the USA in their RFMCs.

4.3 New Zealand

4.3.1 *New Zealand's oceans management*

New Zealand ratified the LOSC in 1996 and consequently, in the United Nations Year of the Oceans in 1998, NZ like many other nations began focusing their attentions on the sustainable use of their oceanic jurisdictions.⁵⁷⁸ In December 1999, the Commissioner for the Environment presented a paper, *Setting Course for a Sustainable Future*, to Parliament recommending the development of a sustainable management strategy for the oceans.⁵⁷⁹ Following this recommendation, in June 2000, Cabinet announced its intention to develop an Oceans Policy.

The Hon Pete Hodgson (Minister Responsible for Oceans Policy) launched the Oceans Policy on 12 October 2000. The Oceans Policy aimed to incorporate 18 pieces of domestic legislation and 14 departments of State regarding New Zealand's oceans use and resources, into an overall policy framework with common goals.⁵⁸⁰ The development of this initiative was delegated to a Committee of six Cabinet Ministers, chaired by the Hon Pete Hodgson.⁵⁸¹ The Oceans Policy for NZ is divided into three stages. In March 2001, the Ministerial Advisory Committee on Oceans Policy (MACOP) led by Dame Catherine Tizard, was established as part of Stage One of the process.⁵⁸² The first stage involved defining the vision and values of the region, by means of a public consultation process. Dame Cath Tizard led the MACOP of eight government-selected New Zealanders in a six-month public consultation process on the Oceans Policy development.⁵⁸³

The MACOP's report to the Minister was released on 30 September 2001. This report highlighted the increasing public awareness of the need for more integrated management regarding the use of the oceans.⁵⁸⁴ It was also recognised that a few strongly held views will

⁵⁷⁸ Ministerial Advisory Committee on Oceans Policy. (2001). "Healthy Sea: Healthy Society. Towards an Oceans Policy for New Zealand." <http://www.oceans.govt.nz/happening/happfra.html>

⁵⁷⁹ Ibid.

⁵⁸⁰ Speden, G. (2000). "Oceans Policy process launched." Media Statement for Hon Pete Hodgson. <http://www.oceans.govt.nz>

⁵⁸¹ Ministerial Advisory Committee on Oceans Policy (2001) "Healthy Sea:..."

⁵⁸² Ministerial Advisory Committee on Oceans Policy (2001) "Healthy Sea:..." and

Speden, G. (2001). "Dame Cath Tizard to lead Oceans Policy group." Media Statement for Hon Pete Hodgson. <http://www.oceans.govt.nz>

⁵⁸³ Speden (2001) "Dame Cath Tizard..."

⁵⁸⁴ Ministerial Advisory Committee on Oceans Policy (2001) "Healthy Sea:..." and Speden (2001) "Dame Cath Tizard..."

be hard to reconcile in this process as some people are feeling over consulted with little follow up action, hence leading to a high degree of scepticism over this latest policy initiative and its pending implementation. Based on this report, Cabinet identified a vision statement for New Zealand's oceans:

Healthy Oceans: New Zealanders understand marine life and marine processes and, accordingly take responsibility for wisely managing the health of the ocean and its contribution to the present and future social, cultural, environmental and economic well-being of New Zealand.⁵⁸⁵

Also identified at this stage were a series of goals, values (identified from the public consultation phase) and principles to guide the development of an Oceans Policy.

The second stage involves designing the policies to achieve the vision of the first stage. Work to date on this stage has incorporated reports on economic opportunities and local level management issues, stakeholder workshops and meetings, a series of working issues papers and a stock take of current arrangements. The final step in this stage will be public consultation on the draft policy options and will be completed in 2004.⁵⁸⁶ And finally, the third stage involves the delivery of the vision through the creation of appropriate policies, legislation, institutional frameworks and the identification of areas for further work.

At present, the marine-based legislation is designed for direct and indirect protection of the environment without a clear common goal or established integration. The *Resource Management Act 1991* (RMA) was the first legislative regime to attempt to integrate New Zealand's land, water, air and other resources.⁵⁸⁷ However, the RMA's scope for integrated oceans management is limited to the management of the coastal waters, extending only as far as the territorial sea and does not include activities such as fisheries.⁵⁸⁸

More specific ocean-use protection issues are covered by:

- the *Marine Mammals Protection Act 1978*, which provides for the establishment of marine mammal sanctuaries within the New Zealand EEZ where deemed necessary for conservation;

⁵⁸⁵ Ministry for the Environment. (2004). "Policy Development." <http://www.oceans.govt.nz/policy/index.html> [Access date: 28 April 2004].

⁵⁸⁶ Ministry for the Environment. (2004). "Stage Two." <http://www.oceans.govt.nz/policy/stage2.html> [Access date: 28 April 2004].

⁵⁸⁷ Ministry for the Environment. (1991). "Managing our future." Wellington: Ministry for the Environment.

⁵⁸⁸ Rosier, J. and Hastie, W. (1996). "New-Zealand coastal planning: an issue-based approach." *Ocean & Coastal Management*, 33 (1-3): 147-165; and See Section 6.5 for more details on the RMA.

- the *Fisheries Act 1996*, which establishes a legislative framework for the sustainable development of the fishing industry, including protection of biodiversity and habitat;
- the *Biosecurity Act 1993*, which covers management of introduced pests and ballast exchange;
- the *Marine Reserves Act 1971*, which is administered by the Department of Conservation and comprises a legislative basis for site specific protection of the marine environment⁵⁸⁹; and
- other legislative regimes covering Transport, Cables and Pipeline, and Customs.⁵⁹⁰

There are several other Acts and policies that contribute to sustainable resource management of the New Zealand EEZ, such as those that deal with Maori claims and aquaculture. These are all to be incorporated into New Zealand's integrated Oceans Policy framework.

New Zealand is currently exploring legislative options for oceans management in recognition of the need to integrate ocean activities and clarify rights and responsibilities for sustainable management of its ocean resources.⁵⁹¹ This work is progressing slowly due to the priority currently assigned to the development of the NZ Foreshore and Seabed Policy.⁵⁹²

4.3.2 *New Zealand's fisheries management*

In response to the exponential growth of the NZ fishing industry, due to the importation of large freezer trawlers, and the imminent danger of inshore fisheries becoming overfished, the *NZ Amendment Act 1986* was developed.⁵⁹³ This Act, more commonly referred to as the Quota Management System (QMS), incorporated 27 commercial species at the time.⁵⁹⁴ Under the QMS, each of the 179 fish stock Total Allowable Catches (TACs), encompassed by the 27 species identified, were set to achieve maximum sustainable yield (MSY) and were subdivided into ITQs.⁵⁹⁵ ITQs were in effect a property right given to the owner in terms of set tonnage of fish permitted to harvest.⁵⁹⁶ The QMS was an initial success due in part to the

⁵⁸⁹ New Zealand currently has 16 Marine Reserves in place covering around 5% of the territorial sea.

⁵⁹⁰ New Zealand Government. (2001). "Oceans Policy."

<http://www.oceans.govt.nz/library/libraryfra.html>

⁵⁹¹ Ayre, M. (unpublished). "New Zealand." Report for the National Oceans Office on international developments in oceans governance, 2004.

⁵⁹² Ayre (unpublished); and

See Section 6.5.6 for further explanation of Foreshore and Seabed Bill tabled in Parliament.

⁵⁹³ Sharp, B.M.H. (1997). "From regulated access to transferable harvesting rights: policy insights from New Zealand." *Marine Policy*, 21 (6): 501-517.

⁵⁹⁴ Batstone, C.J. and Sharp, B.M.H. (1999). "New Zealand's quota management system." *Marine Policy*, 23(2): 177-190; and Sharp (1997).

⁵⁹⁵ Annala, J.H. (1996). "New Zealand's ITQ system: have the first eight years been a success or a failure?" *Reviews in Fish Biology and Fisheries*, 6: 43-62.

⁵⁹⁶ Batstone and Sharp (1999).

widespread support it received from the fishing industry. It was perceived to improve the biological status of the stock, to provide secure access for industry, to provide flexible management and to produce a more efficient market-driven industry.⁵⁹⁷ Resource rents were also introduced with the QMS. A Fisheries Fund was meant to be established to contain these rents, however, funds supposed to be used for the compensation of quota reductions, ended up in the Government Consolidated Fund creating a lot of mistrust.⁵⁹⁸ In 1994 the Ministry of Fisheries was established, resource rents were abolished and the *Fisheries Act 1983* was amended to recover fisheries management costs from the industry.⁵⁹⁹

Initial allocation of quota was distributed in accordance with catch history over a given period and, for fisheries exceeding their maximum biologically sustainable yield, government entered into a voluntary buy back scheme investing some NZ\$45 million to buy back 15,800t of fish.⁶⁰⁰ Under this tonnage system, government involvement in the market was seen as an incentive to harvest the full TAC, as the government would essentially compensate for any reductions in ITQs.⁶⁰¹ In 1990, the predicted reductions required in the TAC of orange roughy would have cost the government some NZ\$100 million. The government was therefore persuaded to change ITQs to a percentage of the TAC and hence alleviate the financial buy-back pressure experienced by the government.⁶⁰² This resulted from a series of negotiations between industry and government, leading to an agreement commonly referred to as the "Accord". In the Accord:

- ITQs were changed from a fixed to proportional basis as of 1 October 1990;
- resource rents were frozen for a five-year period as of 1 October 1989, while compensation for TAC reductions was being arranged; and
- the TAC Advisory Council consisting of half industry and half government was established.⁶⁰³

There are few limitations placed on quota owners, the theory being that the more limitations, the higher the costs of enforcement and the lower the probability of successful management. The law does, however, require that the quota holder must be a New Zealander, and given that many quota owners have joined under cooperative arrangements, if they are from a

⁵⁹⁷ Annala (1996).

⁵⁹⁸ Batstone and Sharp (1999).

⁵⁹⁹ Annala (1996); and
Batstone and Sharp (1999).

⁶⁰⁰ Annala (1996).

⁶⁰¹ Batstone and Sharp (1999); and

Kerr, S., Newell, R.G. and Sanchirico, J.N. (2003). "Evaluating the New Zealand Individual Transferable Quota Market for Fisheries Management." Motu Economic and Public Policy Research Trust. Motu Working Paper # 2003-02.

⁶⁰² Annala (1996).

⁶⁰³ Ibid.

company then at least 75.1% of that company should be New Zealand owned and controlled.⁶⁰⁴ There are no foreign licensed fishing activities in the New Zealand EEZ. Quota owners may not possess more than 35% of the total quota of deep-water fish stocks or more than 20% of the total quota of the inshore fish stocks.⁶⁰⁵ Theoretically though, the more efficient firms will acquire a majority of the quota as they become better established with relatively low running costs and minimal effort.⁶⁰⁶

Compliance and enforcement are managed primarily through a detailed reporting procedure consisting of four documents.⁶⁰⁷ The *Catch Effort and Landing Return* requires the details of the fishing expedition relevant to each fishing method used, for the scientific records and contribution to future stock assessments.⁶⁰⁸ The *Catch Landing Return* is retained by the skipper on board the vessel and is filled out as soon as the catch is landed.⁶⁰⁹ The *Licensed Fish Receiver's Return* must be authorised by a licensed receiver of commercial goods and essentially puts the receiver in a position of responsibility to accurately monitor the use of the resource.⁶¹⁰ Finally, the *Quota Management Report* is retained and filled in by the quota holder.⁶¹¹ The design of these forms is such that they must correlate with one another and each is devised as an additional checkpoint for the sustainable use of the resource.

In September 1992, negotiations began between the Government and representatives of the Maori fishing population.⁶¹² These negotiations led to a MoU under which the *Treaty of Waitangi (Fishery Claims) Settlement Act 1992* was finally settled upon. Under the auspices of this Act, the Government provided some NZ\$150 million for the purchase of 50% of *Sealord Products*, the transfer of 20% of quota from all new fisheries entering the QMS and the recognition of customary fishing rights.⁶¹³ It is of interest to note that the Maori now own or control between 30-50% of the QMS quota.⁶¹⁴

The *Fisheries Act 1996* was written to include guiding environmental principles such as the precautionary approach to management. It also encompasses clear guidelines for conflict resolution mechanisms, consultation procedures and the establishment of a National Fishery

⁶⁰⁴ Clark, I. (1993). "Individual transferable quotas: the New Zealand experience." *Marine Policy*, 17 (5): 340-342.

⁶⁰⁵ Ibid.

⁶⁰⁶ Batstone and Sharp (1999).

⁶⁰⁷ Kerr, Newell and Sanchirico (2003).

⁶⁰⁸ Clark (1993).

⁶⁰⁹ Ibid.

⁶¹⁰ Ibid.

⁶¹¹ Ibid.

⁶¹² Annala (1996).

⁶¹³ Ibid.

⁶¹⁴ Kerr, Newell and Sanchirico (2003); and New Zealand Government (2001) "Oceans Policy"

Advisory Council and for the inclusion of all commercially harvested stocks into the QMS within a three-year period.⁶¹⁵ The *Fisheries Act 1996* clearly makes the Minister of Fisheries responsible for setting the TAC and the commercial TAC (TACC) for each fishery. In setting the TACC, the Minister must take into account the influence of the non-commercial sector (TACN) even though the recreational users are not explicitly allocated quota.⁶¹⁶

Another notable change to the QMS has been the separation of fishing rights as a form of property right from fishing allocations or catching rights. Where it was once the ITQ that was the only requirement to go fishing, as of 1 October 2001, an Annual Catch Entitlement (ACE) is required before a fisher can go fishing.⁶¹⁷ The ITQ is still the quasi property right and the ACE is the specific allocation of the TAC.⁶¹⁸

4.3.3 *Lessons for Australia*

New Zealand has approached the development of its Oceans Policy with much more caution and deliberate consultation than Australia. This could be primarily attributed to Australia's product-driven approach to management and planning, which demands products according to budgetary commitments regardless of whether development indicates more time is required to adequately address unforeseen issues and public concerns. Although Australia consulted widely and arguably effectively in the pre-planning stages of development, there has been a breakdown in this wide-ranging public consultation since the onset of the regional marine planning process and perhaps Australia would be wise in learning from its New Zealand counterpart in slowing the process to adequately consult with and obtain approval from the wider community.

New Zealand has an advanced ITQ system that embraces the concept of setting TACs that take into account recreational and other non-commercial interests before setting a TACC within this limit. Given Australia's recent commitment towards evaluating and developing resource sharing arrangements with recreational and indigenous fishers, it would be beneficial to look further at the New Zealand system. The beneficial features of the QMS are that there are standardised rules for quota definition and trading across species and areas, there are few trading restrictions, there is relative stability in the rules over time and there are low levels of government involvement in the trading process.⁶¹⁹ Also an important feature of

⁶¹⁵ Annala (1996); and
Batstone and Sharp (1999).

⁶¹⁶ Batstone and Sharp (1999).

⁶¹⁷ Kerr, Newell and Sanchirico (2003).

⁶¹⁸ Annala (1996); and
Batstone and Sharp (1999).

⁶¹⁹ Kerr, Newell and Sanchirico (2003).

the New Zealand system is that while quota for the environment has not yet been assigned, there is an explicit recognition of environmental requirements in the setting of TACs. This is something Australia is yet to achieve, where commercial catch takes precedence and now other allocations are to be arranged around this catch. An alternative proposal, to set an overall TAC and subdivide this between resource users, is proposed in Section 7.3.2.1.

4.4 European Union

4.4.1 *The European Union's oceans management*

Environment Action Programmes (EAPs) were brought in by the European Union in the 1970s to ensure progress in environmental issues across the member states.⁶²⁰ EAPs initiate much of the environmental legislation and policy development for the European Community. There have been six EAPs to date, with the most recent one, the 6th EAP, being accepted by the European Parliament and the Council of the European Union on 22 July 2002.⁶²¹ The 6th EAP represents the environmental component of the Community's *Strategy for Sustainable Development*, making the distinct link between the environment and the European objectives for social growth and internationally competitive industries.⁶²² The 6th EAP is focused on a strategic approach to meeting the Community's environmental objectives, primarily through effective implementation and enforcement of current arrangements, the integration of environmental objectives into other policies and programs and the development of innovative and cooperative arrangements.⁶²³

There are four areas identified in the 6th EAP where new efforts are needed to tackle ongoing and increasing environmental problems. These are: climate change; nature and biodiversity; environment and health affecting the quality of life; and natural resources and waste.⁶²⁴ One of the actions foreseen in the 6th EAP is the development of seven thematic strategies to address key environmental issues that require holistic and integrated management. These thematic areas include the: Clean Air For Europe Strategy; Soil Protection Strategy;

⁶²⁰ Irish Wildlife Trust. (2002). "The Sixth Environmental Action Programme." http://www.iwt.ie/6eap_pg1.html [Access date: 22 March 2004].

⁶²¹ Cox, P. and Moller, P.S. (2002). "Decision No. 1600/2002/EC of the European Council and the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme." *Official Journal of the European Communities*, L 242: 1-15.

⁶²² EUROPA. (2003). "Environment 2010: Our Future, Our Choice." <http://europa.eu.int/comm/environment/newprg/> [Access date: 22 March 2004].

⁶²³ Commission of the European Communities. (2001). "Proposal for a decision of the European Parliament and of the Council laying down the Community Environment Action Programme 2001-2010." Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the sixth environment action programme of the European Community. **2001/0029 (COD)**.

⁶²⁴ European Communities. (2001). "Environment 2010: Our Future, Our Choice." Luxembourg: Office for Official Publications of the European Communities.

Sustainable Use of Pesticides Strategy; Protection and Conservation of the Marine Environment Strategy; Waste Prevention and Recycling Strategy; Sustainable Use of Natural Resources Strategy; and Urban Environment Strategy.⁶²⁵

The Commission of the European Communities presented the preliminary paper for the Protection and Conservation of the Marine Environment Strategy to the Council and the European Parliament on 2 October 2002.⁶²⁶ The strategy paper identifies the issues faced by the EU in the protection of the marine environment, the current situation with respect to existing policy, legislation and data and proposes a way forward for the EU to meet the increasing challenges in the protection and conservation of the marine environment.⁶²⁷ The document also outlines the potential objectives for the Marine Strategy according to the issues raised in the initial part of the document.

Overall, the Marine Strategy *should promote the sustainability of the seas and conservation of the marine ecosystem, including sea beds, estuarine and coastal areas, paying special attention to sites holding high biodiversity value.*⁶²⁸ It is proposed to make this overall objective operational through the establishment of semi-sectoral, or issue specific objectives with accompanying time frames. Fourteen sub-objectives are also proposed in this document and fit under the areas of: loss of biodiversity and destruction of habitats; hazardous substances; eutrophication; radionuclides; chronic oil pollution; litter; marine transport; health and environment; climate change; enhancing coordination and cooperation; and improving the knowledge base.⁶²⁹ Finally, a list of 23 actions are proposed to stimulate discussion with regard to meeting these objectives. Unlike Australia's SERMP, the Marine Strategy presents clearly defined actions that are proposed to specifically meet the objectives of the Strategy with associated time frames. This document does not, however, specify exactly how integration across sectors or member states will occur in the long run, rather it addresses specific environmental issues that will contribute to holistic integrated oceans management, once addressed.

⁶²⁵ EUROPA (2003) "Environment 2010:..."

⁶²⁶ Commission of the European Communities. (2002). "Towards a strategy to protect and conserve the marine environment." Communication from the Commission to the Council and the European Parliament. Brussels: 2 October 2002. **COM (2002) 539 final.**

⁶²⁷ Ibid.

⁶²⁸ Ibid: 17.

⁶²⁹ Ibid: 18-20.

4.4.2 The European Union's fisheries management

The Common Fisheries Policy (CFP) was introduced in January 1983, after several years of negotiations.⁶³⁰ The CFP covered four areas of fisheries policy affecting the EU. These were: the conservation of fish stocks; the structuring of the EU fleet and support facilities; the globalisation of the market for fish; and the external fisheries policies that affect the EU.⁶³¹ The conservation of fish stocks was established via the setting of TACs, which were divided and distributed amongst member states as national quotas. These national quotas could be divided into individual quotas at the member state's discretion.⁶³² Other technical measures, such as area closures and minimum mesh sizes, were set in conjunction with these quotas to achieve maximum protection for the fish stock populations.

Member states were given sole fishing rights from the low water mark to 12nm, with the 12nm to 200nm area being open to fishing by all EU member states.⁶³³ The structuring of the fleets and the support facilities was coordinated via funding mechanisms for expansion or reductions in accordance with the multi-annual guidance programs (MAGPs) for each state.⁶³⁴ The Financial Instrument for Fisheries Guidance (FIFG) provides funding for both the decommissioning of vessels and the increase of fishing efficiency, a system that should be balanced according to the prevailing needs of the sustainable industry.⁶³⁵ A single market for the EU was established covering the pricing system, marketing arrangements and world trade policy.⁶³⁶ To ensure that all national enforcement standards were the same, a Community Inspectorate of 25 staff was established.⁶³⁷ The Inspectorate ensures fair and equitable standards of all member state enforcement authorities. EU representatives also deal with international negotiations on behalf of all the member states.⁶³⁸

The first CFP review took place in 1992 and it was not until then that a full list of fishing vessels operating in the EU waters was produced.⁶³⁹ The findings of this review indicated that there were too many vessels for the available resources and that, in conjunction with the

⁶³⁰ Gwiazada, A. (1993). "The Common Fisheries Policy. Economic Aspects." *Marine Policy*, 17 (4):251-255.

⁶³¹ The European Commission. (1998). "2.2 The Common Fisheries Policy." http://europa.eu.int/comm/fisheries/doc_et_publ/factsheets/facts/en/pcp2_2.htm

⁶³² Gwiazada (1993).

⁶³³ Ibid.

⁶³⁴ Ibid.

⁶³⁵ Todd, E. and Ritchie, E. (2000). "VIEWPOINT: Environmental Non-Government Organisations and the Common Fisheries Policy." *Aquatic Conservation: Marine and Freshwater Ecosystems*, 10: 141-149.

⁶³⁶ Gwiazada (1993).

⁶³⁷ The European Commission (1998) "2.2 The Common Fisheries Policy"

⁶³⁸ Gwiazada (1993).

⁶³⁹ Ibid.

regulation of fishing activities, it was necessary to reduce the fleet capacity.⁶⁴⁰ As a result of this review, new fishing regulations were introduced in December 1992, including the introduction of multi-annual TACs and total allowable fishing effort (TAFE) rather than tonnage, multi-species TACs and precise management definitions relating to specific stock objectives and strategies.⁶⁴¹ Uncertainty remained over ecosystem-interactions, which were largely unknown. To be effectual, new multi-annual TACs and multi-species TACs should be accompanied by a strong commitment to improved data collection, as previous TACs based on scientific evidence still resulted in stocks plummeting, indicating the inadequacies of scientific knowledge or understanding.⁶⁴² These new regulations also included the establishment of a Scientific, Technical and Economic Committee to advise the Commission on technical aspects and research.⁶⁴³ A monitoring system was introduced in 1996 to monitor the fishing activities of the EU's 50,000 vessels.⁶⁴⁴

The setting of TACs can ignore black market fishing activities, which can be as much as 30% of the TAC, therefore contributing to the evident overfishing problem faced by the EU.⁶⁴⁵ The EU has been advised by countries such as New Zealand, Iceland, the USA, and Australia that the only means to resolve the problem of overfishing would be to adopt a form of secure private tenure of the resource.⁶⁴⁶ The suggestion of ITQ market-based management has met strong scepticism, due to the strong cultural and jurisdictional differences of the EU compared with other countries currently using this market-based system.⁶⁴⁷ However, the international support for an ITQ management system is strongly supported by economists who say that the only way to stop overcapacity is to ensure a marked return for the right to fish.⁶⁴⁸

A Green Paper on the Future of the CFP was released on 20 March 2001 to initiate public debate with the view of the second CFP review in mind.⁶⁴⁹ The action plan associated with

⁶⁴⁰ Mackenzie, L.D.M. (1993). "Sea Fisheries Management: the EC position." *Marine Policy*, 17 (5): 343-346; and

The European Commission (1998) "2.2 The Common Fisheries Policy"

⁶⁴¹ Mackenzie (1993).

⁶⁴² Karagiannakos, A. (1996). "Total Allowable Catch (TAC) and quota management system in the European Union." *Marine Policy*, 20 (3): 235-248.

⁶⁴³ Mackenzie (1993).

⁶⁴⁴ Gwiazada (1993).

⁶⁴⁵ Bate, R. (2000). "The Common Fisheries Policy: A sinking ship." *The Wall Street Journal*, June 2000.

⁶⁴⁶ Ibid.

⁶⁴⁷ Bate (2000); and
Mackenzie (1993).

⁶⁴⁸ Gwiazada (1993).

⁶⁴⁹ European Commission's Directorate-General for Fisheries. (2001). "Green Paper on the Future of the Common Fisheries Policy." Press Release: 20 March 2001; and
European Commission's Directorate-General for Fisheries. (2001). "Re-thinking the Common Fisheries Policy." Press Release: 20 March 2001.

this report primarily focuses on the protection of sharks and minimising the incidental by-catch of cetaceans.⁶⁵⁰ In an effort to address the environmental implications for and by fisheries, Biodiversity Action Plans were also being developed at this time *to halt the loss of biodiversity in wildlife, ecosystems, crop varieties, animals and fish*.⁶⁵¹ Biodiversity Action Plans meet the EU's international obligations under the *Convention on Biological Diversity* 1992, the requirements of the EU Biodiversity Strategy adopted in 1998 and more recently, the 6th Environment Action Programme commitment to halt the loss of biodiversity by 2010.⁶⁵² The Biodiversity Action Plan for fisheries was one of four adopted on 28 March 2001 and has identified three areas posing a threat to the environment or to the industry.⁶⁵³ These are: the conservation and sustainable use of fish stocks; the protection of non-target species and habitats; and the prevention of damage or pollution from aquaculture.⁶⁵⁴ The issues raised were intended to feed into and be addressed by the second CFP review.

A Communication from the Commission on the Reform of the Common Fisheries Policy – Roadmap was released in 2002 bringing together the components of the second CFP review. This document presents the Commission's action program for the reform of the CFP and gives a roadmap for its implementation. In achieving this, the inadequacies of the current CFP are highlighted, including those supported by environmental NGOs and academic observers relating to the negative impacts created by the economic driving force of the CFP. These negative impacts include overfishing, discards that can be as high as 60% of a vessel's catch, drift-nets and industrial fishing, all of which are not given high priority by bureaucrats in setting the politically-based TACs.⁶⁵⁵ The document then proposes new objectives for a reformed CFP and details nine different action areas for reform designed to address the inherent inadequacies of the CFP in meeting the sustainability objectives relating to the economic, environmental and social dimensions of a reformed CFP.⁶⁵⁶

⁶⁵⁰ European Commission. (2003). "The way forward." CFP Reform Fact Sheet No. 6. **KL-04-03-006-EN-D**.

⁶⁵¹ European Community Biodiversity Clearing-House Mechanism (2004) "EU Biodiversity Action Plans adopted by the European Parliament." <http://biodiversity-chm.eea.eu.int/stories/STORY1016812291> [Access date: 23 March 2004].

⁶⁵² Ibid.

⁶⁵³ European Commission's Directorate-General for Fisheries. (2001). "Commission takes steps to halt loss of Biodiversity." Press Release: 28 March 2001.

⁶⁵⁴ Ibid.

⁶⁵⁵ Todd and Ritchie (2000).

⁶⁵⁶ European Communities. (2002). "Communication from the Commission on the Reform of the Common Fisheries Policy – Roadmap." Luxembourg: Office for Official Publications of the European Communities.

Action areas include:

- the conservation of resources and management of fisheries;
- the repercussion of the conservation policy on the fishing fleet;
- access to waters and resources;
- control and enforcement;
- international fisheries;
- aquaculture;
- the social dimension of the CFP;
- economic management of fisheries in the Union; and
- effective and participatory decision-making.⁶⁵⁷

The Council of Fisheries Ministers accepted the first package of reforms as the new CFP, on 1 January 2003.⁶⁵⁸ More reforms were tabled in 2003 and are currently at different stages of implementation. The reformed CFP specifies that the new CFP shall be guided by the principles of good governance to *ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions*.⁶⁵⁹ It includes the following major changes, designed to address the inadequacies of the original CFP:

- a long-term view to attain/maintain the adult biomass of fish stocks through multi-annual Recovery and Management Plan objectives,⁶⁶⁰ complementing the traditional annual TAC setting based on scientific advice and other associated measures and technical measures depending on the stock.⁶⁶¹ This will increase long-term security for the industry and enable fishers to plan for the future, while ensuring the conservation of fish stocks;
- a simplification of fleet policy replacing the existing MAGPs, giving member states more responsibility in ensuring a balance of their fleet capacity and fishing opportunity and an end to blanket subsidies for fleet renewal, renewal now only occurring when compensated by the exit of equivalent or higher capacity.⁶⁶² This will be accompanied by a restructuring of public aid priorities through the FIFG and

⁶⁵⁷ European Communities (2002) "Communication from the Commission...": 8.

⁶⁵⁸ European Commission. (2003). "Why did we need a new fishery?" CFP Reform Fact Sheet No. 1. **KL-04-03-001-EN-D**.

⁶⁵⁹ European Communities. (2002). "Council Regulation (EC) No. 2371/2002 of 20 December 2002 on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy." *Official Journal of the European Communities*, **L 358**: 59-80.

⁶⁶⁰ Ibid: 62-63 (Articles 5 & 6).

⁶⁶¹ European Commission. (2003). "A long-term approach to fisheries management." CFP Reform Fact Sheet No. 2. **KL-04-03-002-EN-D**.

⁶⁶² 1GT must be withdrawn for 1GT introduced for vessels under 100GT; and 1.35GT must be withdrawn for 1GT introduced for vessels between 100GT and 400GT (1GT:1GT after December 2004) - European Commission. (2003). "A new policy for the fleet." CFP Reform Fact Sheet No. 3. **KL-04-03-003-EN-D**.

complemented by a special fund under the CFP reform to meet the objectives of the multi-annual plan objectives and to address the overcapacity of the EU fleet as a priority, through the decommissioning and permanent removal of vessels⁶⁶³;

- standardisation of national control measures, through an EU Joint Inspection structure and a catalogue of sanctions, to ensure uniformity of control and enforcement measures across the EU, including mandatory VMS for >15m vessels by 1 January 2005⁶⁶⁴;
- building on consultation at the EU level that currently occurs, Regional Advisory Councils (RACs) comprising fishermen, scientists and other relevant stakeholders, covering the sea area of at least two member states' responsibilities, will be established to facilitate regional and localised stakeholder involvement and equity across the EU⁶⁶⁵;
- a compliance scoreboard displaying the enforcement record of member states in relation to the CFP to raise public awareness, pressuring more effective enforcement⁶⁶⁶; and
- the transparent decentralisation of certain management powers, at least to the national level, so that emergency measures, in response to environmental crises identified by RACs, the Commission or member states, may be implemented.⁶⁶⁷

The CFP, however, still denies individual member states the right to establish their own fisheries policies, hence negates any monetary revenues for the individual states that might otherwise be accrued.⁶⁶⁸ In contrast, the EU energy policy is such that individual states can make their own policies regarding prospecting for oil and can keep any taxes and revenues accrued from fixing the corporation tax and royalties.⁶⁶⁹ Individual states have to therefore share a valuable resource, fish stocks, with all other EU states yet receive no monetary revenues, perhaps lessening the incentive to abide by the CFP.

⁶⁶³ European Communities (2002) "Council Regulation (EC) No. 2371/2002..." L 358: 64-66 (Chapter III: Adjustment of Fleet Capacity).

⁶⁶⁴ European Commission. (2003). "Better and more uniform enforcement of fisheries rules." CFP Reform Fact Sheet No. 4. **KL-04-03-004-EN-D**.

⁶⁶⁵ European Commission. (2003). "Improving the management of the Common Fisheries Policy." CFP Reform Fact Sheet No. 5. **KL-04-03-005-EN-D**.

⁶⁶⁶ European Commission (2003) "Better and more uniform..."

⁶⁶⁷ European Commission (2003) "Why did we need a...";

European Commission's Directorate-General for Fisheries (2001) "Re-thinking the..."; and European Commission's Directorate-General for Fisheries. (2001). "Results of the Fisheries Council of 25 April 2001." Press Release: 26 April 2001.

⁶⁶⁸ Gwiazada (1993).

⁶⁶⁹ Ibid.

4.4.2.1 *Regional Advisory Councils*

In October 2003 the European Commission developed a proposal paper for a Council Decision on the establishment of RACs under the CFP.⁶⁷⁰ RACs will be established to offer advice to the Commission and the member states when called upon and of their own initiative and to enhance dialogue between different interests concerned with the CFP. This decision provides the framework from which RACs should be established, recognising that the details and functioning will be specific to the RAC developed for each region and as such cannot be dictated at this level. Six RACs are proposed covering each of the following areas: the Baltic Sea; the Mediterranean Sea; the North Sea; the North Western waters; the South Western waters; and Pelagic stocks.⁶⁷¹ These areas are large enough to cover management units based on biological criteria and to fit within organisational and financial constraints, while recognising that subdivisions of the RACs may be required to deal with specific fisheries or regions.

Each RAC will comprise a general assembly (GA) that meets at least annually, comprising enough stakeholders to achieve an effective balance between inclusiveness and efficiency of discussion. The GA is to appoint an executive committee (EC) of 12-18 members to manage the work of the RAC and by unanimous vote, an impartial chair. Two-thirds of both the GA and EC membership shall be allotted to representatives of the fishing sector, with the remaining one-third comprising other interest groups, such as environment or recreational fishers. At least one catch sector representative from each member state shall be represented on the EC. The proposal also outlines the appropriateness for observers, the public and for linkages between these forums and other management and administrative bodies, such as the Advisory Committee on Fisheries and Aquaculture, to avoid duplicated effort. The ultimate economic goal for the RACs is to be self-financing in the long-term, but proposals are made for start-up funding for the first three years.

RACs are an indication of the EU's commitment towards more bottom-up intra-sectoral and cross-sectoral integrative management. It is recognised that those who are affected by any policy or management decision need to be involved in the decision-making process to foster a sense of ownership that will encourage compliance with the final outcomes. The inclusion of cross-sectoral interests is a reflection of the current international move towards ecosystem-based management, which implies that the oceans are interconnected and

⁶⁷⁰ Commission of the European Communities. (2003). "Proposal for a Council decision establishing Regional Advisory Councils under the Common Fisheries Policy." Brussels: COM(2003) 697 final. 2003/0238 (CNS).

⁶⁷¹ Ibid.

therefore any action taken by any one user will have an impact on the rest of the system, hence the other users of these resources.

The Commission arguably deals effectively with cross-jurisdictional integration at the inter-state level, but is limited in its scope to deal with intra-state integration or between neighbouring member states. The establishment of RACs, however, recognises that all levels of government and all relevant stakeholders need to be part of the decision-making process to ensure effective compliance. RACs also comprise multi-fishery representatives, therefore have the potential to address any intra-sectoral issues or conflicts that may arise. However, being limited to a consultative capacity, it is arguable whether the RACs will actually hold any influence over decision-making by the Commission.⁶⁷² The rights of access and withdrawal of Community fishermen will remain invariable under the reformed CFP and their power to influence fisheries management will be dependent on the relevant management body's uptake of recommendations and advice provided by the RAC.⁶⁷³ It may be that the RACs will provide little more than a sounding board for Commission decisions or a forum for localised conflict management.

4.4.3 *Lessons for Australia*

Until recently the EU, with its ambiguous and ineffective policies, was arguably trailing internationally with respect to integrated oceans management. The passing of the 6th EAP in 2002 emphasised the environmental problems being faced by the EU in the management of, amongst other things, its marine environment. The Marine Strategy is in its initial stages and is somewhat akin to *Australia's Oceans Policy* in its ambitious commitment towards integrated oceans management, yet it approaches this through the holistic management of environmental issues recognising sectoral and jurisdictional boundaries that will be long-lived. The Marine Strategy focuses on an overall management objective, rather than a focus on institutional arrangements that perhaps Australia could learn from. The development of regional marine planning in Australia appears to emphasise how things would be done rather than addressing what was to be achieved. Arguably, with a clearer focus on the overall objectives of what was to be achieved from the SERMP and how this was to be measured, the process would have been inherently more apparent.

The EU's commitment to establish RACs is a reflection of Australia's fisheries MACs, the primary difference being the jurisdictional challenges faced by the EU in incorporating multi-cultural interests. RACs, like Australia's MACs, will hold influence over decision-

⁶⁷² Iglesias-Malvido, C., Garza-Gil, D. and Varela-Lafuente, M. (2002). "Management systems in the EU fisheries." *Marine Policy*, 26: 403-413.

⁶⁷³ Ibid.

making only in so much as the overall governing body decides to adopt recommendations and advice offered by these consultative forums. However, it would be of benefit for Australia to keep a watchful eye on the effectiveness of development and implementation of these RACs, with the view of adapting cross-jurisdictional, cross-sectoral and intra-sectoral integration to the challenges of regional marine planning. Benefit could be gained from determining the effectiveness of such a large body in providing meaningful advice and conflict management on regional issues and the potential impact of this advice.

4.5 Iceland

4.5.1 *Iceland's oceans management*

The National Strategy on Sustainable Development, also known as the National Environment Strategy (NES) of Iceland, entitled *Towards Sustainable Development*, was adopted by Government in March 1993.⁶⁷⁴ The NES focused on the conservation and sustainable use of marine living resources, integrated coastal zone management and marine environmental protection.⁶⁷⁵ As a follow up to its adoption, the Minister for Environment assigned seven working groups the task of developing strategic action plans towards sustainable development in the various sectors.⁶⁷⁶ In 1996, these working plans were compiled into one document, *A Plan of Action for Sustainable Development in Iceland*, which was adopted by Government in 1997 and revised in August 2002, as the extensive implementation plan for the NES.⁶⁷⁷ The various Ministries charged with responsibility of the sectors covered by the report are today continuing the inaugural task of adopting this Plan of Action, however, this is occurring in a rather haphazard manner with sectoral economic objectives taking precedence.⁶⁷⁸

4.5.2 *Iceland's fisheries management*

The *Fisheries Management Act* was introduced in Iceland in December 1983.⁶⁷⁹ Under the auspices of this Act, the Ministry of Fisheries was given the power to determine the details

⁶⁷⁴ Felixson, T. (1997). "Iceland Country Profile Implementation of Agenda 21: Review of Progress made since the United Nations Conference on Environment and Development, 1992." United Nations: <http://www.un.org/esa/earthsummit/icela-cp.htm>; and United Nations. (1999). "Natural Resource Aspects of Sustainable Development in Iceland - Ocean and Coastal Areas." <http://www.un.org/esa/agenda21/natlinfo/countr/iceland/natur.htm>.

⁶⁷⁵ United Nations (1999) "Natural Resource Aspects..."

⁶⁷⁶ Felixson (1997).

⁶⁷⁷ Felixson (1997); and

United Nations (1999) "Natural Resource Aspects..."

⁶⁷⁸ OECD. "Environmental Performance Review of Iceland." The OECD Environment Program. <http://www.oecd.org/dataoecd/63/34/2378124.pdf> [Access date: 28 April 2004].

⁶⁷⁹ Eythorsson, E. (2000). "A decade of ITQ-management in Icelandic fisheries: consolidation without consensus." *Marine Policy*, 24: 483-492.

of a proposed quota system. Initial allocation of quota was therefore based on the previous three years of catch history for each vessel and a portion of the TAC was allocated accordingly.⁶⁸⁰ An effort-based option was introduced for smaller vessels in 1985. It followed that vessels of 10GRT had free access to the fishery until 1988 and vessels under 6GRT had free access until 1990.⁶⁸¹ However, as smaller vessels became more numerous, their combined catches became more influential on the health of the fish stocks.

In 1988-1989 there were signs of economic crisis indicating that the management system in place was ineffectual. A new *Fisheries Management Act* was established in 1990, implementing ITQs for just about all the Icelandic fisheries.⁶⁸² This Act also abolished the effort option for trawlers that had caused increasing concern in the most recent years. Quotas assigned under the Act are permanent, divisible and fairly freely transferable.⁶⁸³ These characteristics have brought about concerns surrounding the question of privatisation and have been met with much discord.⁶⁸⁴ Under the legislation, however, fish resources remain the property of the state and quota transfers are limited to Icelandic flagged vessels only.⁶⁸⁵

Over the past decade, since the introduction of the ITQ system, Iceland has been dealing with many unforeseen problems related to the market-based system, which has resulted in a general lack of public support. The primary issues that have come to light involve allocation of quota issues and the concentration of quota.⁶⁸⁶ In an attempt to combat the concentration issue, an upper limit to TAC shares was set in Parliament in March 1998.⁶⁸⁷ This was set at no more than 10% TAC for cod and haddock and no more than 20% TAC for other demersal species.⁶⁸⁸ The issue of contract leasing has been dealt with by the establishment of the Quota Exchange Market (QEM) that essentially deals with any excess quota distribution in a fair way that does not compromise the salaries and livelihood of the dependant crew members.⁶⁸⁹ A more social aspect of the ITQ system is the dependence of communities on quota holders. If a quota holder decides to leave a community or sell their quota, then this affects the community members that have perhaps put themselves on the line by moving to a certain area and investing in establishment costs, reliant on this quota for work.

⁶⁸⁰ Eythorsson (2000).

⁶⁸¹ The Icelandic Ministry of Fisheries. (2001). "Responsible Fisheries."
<http://www.fisheries.is/managem/index.htm>

⁶⁸² Eythorsson (2000).

⁶⁸³ The Icelandic Ministry of Fisheries (2001) "Responsible Fisheries"

⁶⁸⁴ Eythorsson (2000).

⁶⁸⁵ Ibid.

⁶⁸⁶ Ibid.

⁶⁸⁷ Ibid.

⁶⁸⁸ Ibid.

⁶⁸⁹ Ibid.

Iceland has moved from a regulated industry with production units embedded in the communities to a market-based industry with highly mobile production units showing no affiliation with any specific communities. The question of the validity and future of the ITQ system, in light of international environmental commitments, is now being addressed by the Resource Committee and the Consensus Committee.⁶⁹⁰ Iceland's rich marine life remains its most important natural resource and fisheries still drive Iceland's economic development, hence the sustainable development of the fishing sector is paramount to Iceland's future.⁶⁹¹ Iceland has traditionally attempted to run a transparent management system involving all stakeholders and those with an interest, however, the review committees (see above) have no stakeholder representation. This is perhaps because the situation has become so tense between principal stakeholder groups that communication is very difficult and consensus would be near impossible.⁶⁹²

4.5.3 *Lessons for Australia*

Iceland is not embarking upon integrated oceans management as such, but rather is addressing sustainable development of its sectors under the NES. While this is a very different approach from Australia, it will be of benefit to note whether sectoral management towards a common goal of sustainability will work as effectively as attempts to integrate sectoral management under the umbrella of integrated oceans management. Iceland's approach to integrated oceans management has been relatively haphazard and it is therefore difficult to draw any noteworthy conclusions from Iceland's experience to date.

Icelandic fisheries on the other hand have been sustainably governed by ITQs since their inception. The years of experience and well-established nature of the market-based system have highlighted numerous areas of contention and/or potential problems from which Australia may benefit from learning. The most evident problem that can arise in the development of any ITQ system is inappropriate initial allocation of quota, which can lead to high-grading of catch and unreported discards.⁶⁹³ It is important to accurately estimate proportions of catch in the first instance to avoid these problems emerging. This relies on accurate catch data, which is often missing, hence a precautionary approach needs to be taken in setting quota. Another problem that may arise is the concentration of quota allocated to particular fishers or companies. Iceland and New Zealand have overcome this by setting limits on quota concentrations. Local community impacts of market-based

⁶⁹⁰ Eythorsson (2000).

⁶⁹¹ Felixson (1997).

⁶⁹² Eythorsson (2000).

systems are felt through the social disparity of arrangements, whereby quota owners have no strong affiliations with local communities and readily sell quota for use in other communities, taking with it the localised financial expenditure. The other issues relevant to ITQs are the increasing international environmental pressures on domestic fisheries and the capacity to incorporate ecosystem-based management measures, which can be lacking in market-based structures if not issued with restrictions or instructions. As Australia increasingly moves towards Statutory Fishing Rights and market-based quota systems, it is important to plan for the resolution of these problems, if not pre-empt them to avoid their occurrence in the first place.

Market-based systems, such as Iceland's ITQs, are generally more suited to address short-term economic objectives that have the potential to reduce excess competition and enhance industry efficiency, rather than the social and environmental objectives incorporated in ESD (as it is referred to in Australia).⁶⁹⁴ Co-management approaches, such as those used in Australian fisheries, however, are better suited to incorporate social objectives in achieving economic viability in terms of enforcement and compliance. Market systems are also based on the premise that government has ultimate control in imposing regulations, whereas co-management recognises the importance of stakeholder support for implementation of government policies at the operational level.⁶⁹⁵ For this reason, while it is important to recognise the benefits associated with the allocation of fishing rights and ITQs, as in Icelandic and New Zealand fisheries, Australia should also recognise the benefits of the current co-management approach in ensuring that the triple-bottom line objectives – including social, environmental and economic values – of ESD are adequately met.

⁶⁹³ Squires, D., Campbell, H., Cunningham, S., Dewees, C., Grafton, R.Q., Herrick, S.F., Kirkley, J., Pascoe, S., Salvanes, K., Shallard, B., Turris, B. and Vestergaard, N. (1998). "Individual transferable quotas in multispecies fisheries." *Marine Policy*, 22 (2): 135-159.

⁶⁹⁴ Dubbink, W. and van Vliet, M. (1996). "Market regulation versus co-management? Two perspectives on regulating fisheries compared." *Marine Policy*, 20 (6): 499-516; and Squires *et al* (1998).

⁶⁹⁵ *Ibid.*

4.6 Summary

This chapter highlights the efforts of Australia in advancing Oceans Policy, despite the complexities of multi-departmental mandates and sectoral interests, which have hindered some other international developments. Initial attempts to implement such policies in Canada and the USA failed due to a lack of commitment to effectively integrate decision-making processes. Regional fisheries bodies, not dissimilar to Australian MACs, have been adopted in the USA and EU to manage for intra-sectoral integration within the fisheries sector. While Australia reflects the participative aspects of these arrangements, MACs are limited in their scope to primarily address commercial fishing issues. It would be of benefit to broaden the scope of these arrangements so that fisheries can meet the integrative objectives of regional marine planning.

Market-based fisheries management is increasingly being used globally for the sustainable development of the industry. Australia is developing market-based approaches to fisheries management that will greatly benefit from the co-management arrangements already in place in Australia to meet the objectives of ESD. Australia needs to give due recognition to the issues encountered by international counterparts in implementing market-based regimes, such as quota concentration and the demise of local economies, to ensure they are appropriately managed for in Australia's domestic fisheries.

This chapter illustrates Australia's leadership in the international community with respect to integrated oceans and fisheries management practices. While these evaluations are effective in establishing the beneficial aspects of national governance systems, more detailed scrutiny into the working relationships of natural resource management models will provide informed insights into the capacity for best practice integrated fisheries management that can meet the broader objectives of regional marine planning. Some Australian natural resource management models are analysed in the following chapter for their capacity to incorporate intra-sectoral, cross-sectoral and cross-jurisdictional integration and effective conflict management. Australian natural resource management models are used as they are established with similar governance structures to meet the same overarching national objectives as fisheries, hence can potentially better inform the integration of Australian fisheries in regional marine planning.

CHAPTER 5: AUSTRALIAN NATURAL RESOURCE MANAGEMENT MODELS⁶⁹⁶

Policy development is enhanced by the use of policy learning based on past experience that can be transferred into current management practices. There are many parallels between integrated oceans and fisheries management and other natural resource management (NRM) experiences. It is important therefore, that the Commonwealth, in developing Regional Marine Plans, learn from approaches that have worked well and those which have proven to be unsuccessful initiatives in other NRM areas.

This chapter examines how selected Australian NRM models progress towards ecosystem-based management. It does so by: assessing their overall capacity for integration in terms of the Policy Integration Scale (see Section 1.2.1); identifying the more specific components that effectively address cross-sectoral and cross-jurisdictional integration; and assessing their capacity to address conflict management issues. This assessment is used to consider approaches that could address integration of fisheries issues in the broader context of regional marine planning.

Some NRM models described in this chapter have demonstrated capacity for cross-jurisdictional integration or coordination, such as in the Great Barrier Reef and the Murray Darling Basin. Others have had to contend with cross-sectoral planning issues, such as Queensland's Integrated Planning process and Tasmania's Regional Forest Agreement. South Australia has embarked upon a widely accepted marine planning process from which many of these issues, and issues of conflict, are being effectively dealt with through constructive participative and consultative stakeholder processes.

5.1 Queensland *Integrated Planning Act 1997*⁶⁹⁷

Queensland's *Integrated Planning Act 1997* (the IPA) is a legislative instrument designed to streamline government approval processes across two tiers of government and all relevant sector-based agencies to achieve ecological sustainability in land-use and development. Planning instruments developed under the IPA are required to be comprehensive, holistic and include adequate consultation between government and the public. As such, planning

⁶⁹⁶ This chapter has been adapted from the following report, with the consent of the National Oceans Office (see Appendix One for signed permission forms):
Foster, E. (unpublished). "Evaluation of Alternative Models." Consultancy report for the National Oceans Office, 2003.

⁶⁹⁷ The following description is drawn heavily from:
England, P. (2001). "Integrated Planning in Queensland." *First edition*. NSW: The Federation Press.

instruments include provisions for integration and are also consistent with the objective of ecological sustainability.

5.1.1 *Planning Instruments*

5.1.1.1 *Planning Schemes*

Planning Schemes are the highest local level planning instrument in the IPA hierarchy (second only to State Planning Policies, which may override these schemes on a matter of State interest). At the heart of Planning Schemes is the identification of Desired Environmental Outcomes (DEOs). Planning Schemes also include measures to facilitate the achievement of DEOs (that is, codes). Performance indicators are included to assess the achievement of DEOs, however, this is no longer a compulsory requirement of Planning Schemes. The Planning Scheme development process focuses on public consultation and consultation across government between ministers on matters of State interest.⁶⁹⁸

5.1.1.2 *Other instruments of the IPA*

Instruments of the IPA that support or advise Planning Scheme development are:

- *Temporary Local Planning Instruments*⁶⁹⁹ - In the event of an immediate environmental risk, Temporary Local Planning Instruments can modify a Planning Scheme for a period up to a year. There is no public consultation provided for in this procedure and the Minister may repeal these temporary instruments at any time;
- *Local Planning Scheme Policies*⁷⁰⁰ - Local Planning Scheme Policies support Planning Schemes at a local government level but are not regulatory in nature. In formulating these policies the IPA provides opportunity for public consultation, but there are no provisions for ministerial consultation or approval;
- *State Planning Policies*⁷⁰¹ (SPPs) - SPPs may only be made by the Minister and only on matters of State interest affecting the economic or environmental interests of the State/region, or ensuring efficient, effective and accountable planning/development. The process of formulating SPPs is the same as for Planning Schemes. Reasoned responses must be issued for each submission. Local governments are issued a copy of the final policy to advise their Planning Scheme development process.

⁶⁹⁸ See IPA Schedule 1

⁶⁹⁹ See IPA Schedule 2

⁷⁰⁰ See IPA Schedule 3

⁷⁰¹ See IPA Schedule 4

5.1.2 Review of Planning Instruments

Local governments are required to review their planning instruments every eight years.⁷⁰² In addition to this periodic review, the Minister may order a review of planning instruments to protect or give effect to a State interest. Regional Planning Advisory Committees (RPACs) may also be established by the Minister to report on matters identified by the Minister in the terms of reference for the RPAC. RPACs provide a framework for coordinating planning activities within a region, but are limited in scope to those issues raised by the Minister.

5.1.3 Integrated Development Assessment System

The IPA provides scope for cross-jurisdictional and cross-sectoral integration through the Integrated Development Assessment System (IDAS). The IDAS is designed to integrate state and local government approval processes and its referral process ensures effective coordination across all relevant sector-based agencies.⁷⁰³

There are four stages to the IDAS process:

1. *Application Stage*
2. *Information and Referral Stage* (the assessment manager directs the applicant to supply the application to each applicable referral agency (if any) for their assessment of the application). Referral agencies must base their assessment on the agency's own laws and policies. They must also have regard to the relevant Planning Scheme; SPPs; and any relevant designation of land for Community Infrastructure. The types of referral agencies are:
 - Concurrence agencies (power to impose conditions/refuse an application/request further information); or
 - Advice agencies (recommend conditions/refusal of application/provide other advice).
3. *Notification Stage* (public submissions are sought. Referral agencies are not required to take into account public submissions in their assessments)
4. *Decision Stage* (different rules apply for different types of development, but the relevant local government is the usual decision-maker). For:
 - Code-Assessable (The local government/assessment manager's decision must be based on the application; applicable codes; any relevant SPPs, and sometimes, the Priority Infrastructure Plan. An application can only be refused if it does not comply with applicable codes and cannot be made compliant by imposing conditions); or

⁷⁰² IPA s 2.2.1

⁷⁰³ IPA s 3.1.1

- Impact-Assessable (The local government/assessment manager's decision must be based on the application; the Planning Scheme and other applicable planning instruments; applicable codes other than concurrence agency codes; relevant SPPs; existing approvals over the land/adjacent land; and matters prescribed under a regulation. An application can be refused or conditions applied if a concurrence agency requires such action or if the assessment manager so decides.)

Ministerial IDAS powers: The Minister may give directions to an assessment manager prior to the assessment manager's decision if the development involves a State interest and the matter lies outside the jurisdiction of a concurrence agency. In these circumstances, the Minister may direct an assessment manager to refuse an application, impose conditions upon an application, approve an application in part only or make a preliminary approval. These directions are appealable. The Minister or Premier also has the power to call-in and decide or re-examine development applications involving State interests. If an application is called-in, the assessment process continues from the point it was called-in and concurrence agencies take on an advisory role. There is no provision for appeal in this case. Ministerial call-in powers may be exercised after an assessment manager's decision has been made and, as such, holds greater power than the direction of the Minister.

5.1.4 *Appeals processes*

5.1.4.1 *Planning and Environment Court*

The Planning and Environment Court (PEC) functions in a similar manner to a District Court, with the judge of the PEC having the same powers as a District Court judge in summoning, examining and prosecuting witnesses/persons brought before the PEC.⁷⁰⁴ The rights of appeal to development decisions are available to those parties involved in the process and under certain circumstances this appeal will delay the development process until a decision on the appeal is made. Alternative Dispute Resolution⁷⁰⁵ provisions apply to proceedings of the PEC in accordance with the *District Courts Act 1967* (part 7) and the *Uniform Civil Procedure Rules 1999* (Chapter 9; part 4).

5.1.4.2 *Building and Development Tribunals*

In the event that a development application is refused or the applicant feels some aspect of the approval warrants appeal, then the Chief Executive may establish a Building and

⁷⁰⁴ IPA s 4.1.4(3)

⁷⁰⁵ IPA Ch 4 Part 1 Div. 11 s 4.1.48

Development Tribunal to decide on the appeal. A Tribunal comprises of up to five general referees selected by the Minister for a period up to three years, or in the case of an appeal against the local government's decision about the amenity and aesthetics assessment of a building, then a Tribunal of just three aesthetic referees selected by the Chief Executive is required for the hearing of just one or more decisions on the amenity and aesthetics of a building.⁷⁰⁶ This type of Tribunal appeal is a merits review appeal. Further appeal would lie in judicial review for legal error by the Tribunal.

5.1.5 *How are integration and conflict dealt with in this NRM model?*

The IPA attempts to take into account the full range of values affecting land-use and development. The IPA defines ecological sustainability in a multi-faceted manner to ensure consideration of environmental, economic development and community factors in decision-making. Decision-makers are thus obliged to exercise their powers in ways that advance or have regard to the purpose of the IPA, which is:

to seek to achieve ecological sustainability by – (a) coordinating and integrating planning at local, regional and State levels; and (b) managing the process by which development occurs; and (c) managing the effects of development on the environment (including managing the use of premises).⁷⁰⁷

This ensures that Government has one voice and that cross-sectoral issues are considered. In this respect, the IPA has a capacity for 'negative' integration, or Level 4 on the Policy Integration Scale, with each plan and arrangement in the process *not inconsistent* with relevant higher level codes and policies in place.

The IPA allows the Minister to establish Regional Planning Advisory Committees to report on matters identified by the Minister in their terms of reference.⁷⁰⁸ The scope of these Committees is, however, limited to the issues dictated by the Minister and their jurisdiction limited to those local councils also identified by the Minister, hence limiting their capacity for proactive integrated planning and management.

Cross-jurisdictional integration in the IPA operates at the planning level. All Planning Schemes must deal with the 'core matters' of land-use and development, infrastructure and valuable features. They must coordinate and integrate these matters including any State and regional dimensions. Currently some, and in future all, local governments will have to

⁷⁰⁶ IPA Ch 4 Part 2 Div 1 s 4.2.1 (2) & (4)

⁷⁰⁷ IPA s 1.2.1

⁷⁰⁸ IPA s 2.5.2(3).

include a Priority Infrastructure Plan (PIP) in their Planning Schemes to show planned, coordinated infrastructure development for future years. Draft Planning Schemes are circulated among State departments to ensure a whole of government approach.

Cross-sectoral integration at the uses and user level is limited to the ability of users to make their concerns known through the public submission process in the formulation of planning instruments and during the notification phase during the assessment of impact-assessable development. The scope of this as a means to implement cross-sectoral integration is questionable as there is no obligation for the decision-makers to act on these submissions or to achieve any particular outcome in relation to multiple-use unless this is specified in one of the planning instruments. However, given that the higher-level decision-makers are elected ministers, it is in their political interest to address concerns raised in the public submission phase.

Conflict is primarily dealt with through the appeals process defined in the IPA. Appeals are, however, limited to those involved in the process with external appeals or concerns reserved for the public consultation period. Although there are extensive consultation periods allowed for, whereby concerns of external parties may be raised, there are no requirements for these to be addressed or resolved in the final development plan, hence the capacity to effectively deal with some of the potential conflicts with external parties is limited.

5.2 Great Barrier Reef Marine Park

The *Great Barrier Reef Marine Park Act 1975* was the first of its kind to incorporate cross-jurisdictional issues in conservation and multiple-use marine management. Under the auspices of this Act, the Great Barrier Reef Marine Park (GBRMP) is managed for conservation and sustainable- or reasonable-use as a whole through spatial zoning of uses.⁷⁰⁹ In the GBRMP area, multiple-use management in the broadest sense means the spatially defined zoning of uses, rather than the integrated management of uses within specified zones. There are provisions, however, for integrated multiple-use management through concepts such as site and area management plans, although these must be consistent with the zoning plans. There are also provisions for overall management decisions to be made applicable to the entire GBRMP. These provisions should be reflected in the zoning plans except for the cases of approved research. An example of this was the creation of a regulation banning spearfishing using SCUBA anywhere in the Great Barrier Reef Region,

⁷⁰⁹ Day, J.C. (2002). "Zoning-lessons from the Great Barrier Reef Marine Park." *Ocean & Coastal Management*. 45: 139-156.

except for purposes of research approved by the Great Barrier Reef Marine Park Authority (GBRMPA).⁷¹⁰

5.2.1 *Great Barrier Reef Marine Park Act 1975*

The *Great Barrier Reef Marine Park Act 1975* (GBRMP Act) establishes the boundaries of the Great Barrier Reef Region in accordance with the provisions of the *Seas and Submerged Lands Act 1973*. Under the auspices of the GBRMP Act, Queensland retains responsibility for regions landward of the low-water mark and almost all islands in the GBR region at the time of Federation. The Commonwealth retains responsibility for all waters below low-water mark and for all islands assigned to the Commonwealth at Federation or subsequently. The retention of this arrangement for the Great Barrier Reef was a condition in negotiations leading to the OCS arrangements.

As well as establishing the boundaries of the marine park, the GBRMP Act establishes:

- the Great Barrier Reef Marine Park Authority (GBRMPA) and describes its functions;
- the Great Barrier Reef Consultative Committee (GBRCC);
- the object for preparation of zoning plans (s 32(7));
- a moratorium on mineral extrapolation, except for approved research purposes; and
- power to make regulations addressing pollution outside the Marine Park (s 66(2)(e)).

5.2.1.1 *Great Barrier Reef Marine Park Authority*

Under the auspices of the Act, a Commonwealth statutory authority, the GBRMP Authority (GBRMPA), was established with responsibility for multiple-use management of all waters in the GBR marine environment, including the Commonwealth waters and the waters surrounding the State's islands.⁷¹¹ The goal of the GBRMPA is:

To provide for the protection, wise use, understanding and enjoyment of the Great Barrier Reef in perpetuity through the care and development of the Great Barrier Reef Marine Park.⁷¹²

The GBRPMA comprises one Commonwealth chair (chief executive), a member appointed to represent the interests of the indigenous communities adjacent to the Marine Park, and two part-time representatives nominated by each of the Queensland and Commonwealth

⁷¹⁰ Day (2002); and

Great Barrier Reef Marine Park Regulations 1983 (as amended), s.38.

⁷¹¹ GBRMPA. (2002). <http://www.gbrmpa.gov.au/>

⁷¹² Ibid.

Governments respectively.⁷¹³ The functions of the GBRMPA include making recommendations to the Minister and carrying out activities in the following areas:

- the development and care of the marine park;
- carrying out and arranging research, monitoring and data interpretation;
- environmental impact assessments and permitting of use;
- providing and arranging for the provision of educational, advisory and informational services;
- preparing and implementing zoning plans;
- preparing and implementing plans of management; and
- advising on and facilitating financial arrangements with Queensland for the administration of the marine park.⁷¹⁴

In 1998, GBRMPA was restructured to form 4 critical issues groups (fisheries; tourism and recreation; water quality and coastal development; and conservation, biodiversity and world heritage) and 4 support groups (program delivery; corporate services; legal services; and information support) with two staff situated in Environment Australia.⁷¹⁵

5.2.1.2 *Great Barrier Reef Consultative Committee*

The Great Barrier Reef Consultative Committee (GBRCC) is an independent advisory body established to encourage interaction between users and user groups. The Commonwealth Minister for Environment and Heritage appoints the GBRCC members for a three-year period.⁷¹⁶ Membership consists of a GBRMPA-appointed member as the chair and no less than 12 other members, of which the Queensland Government may nominate one-third.⁷¹⁷ In practice the Commonwealth closely consults with Queensland in selecting members so that effectively at least half the members are Queensland nominees. The GBRCC provides advice to the Minister, either as asked by the Minister or of its own accord, on the operation of the GBRMP Act. It is also charged with providing advice to the GBRMPA upon request on issues relating to marine parks. The GBRCC meets up to three times a year and may appoint working groups as required.

⁷¹³ Kenchington, R.A. (1990). "Managing Marine Environments." New York: Taylor & Francis; and Kriwoken, L.K. (1991). "Great Barrier Reef Marine Park – Intergovernmental relations." *Marine Policy*. September 1991: 349-362.

⁷¹⁴ *Great Barrier Reef Marine Park Act 1975* (as amended), s.7; Kenchington (1990); and Kriwoken (1991).

⁷¹⁵ GBRMPA. (2000). "Annual Report 1999-2000." Townsville: GBRMPA.

⁷¹⁶ Kriwoken (1991).

⁷¹⁷ GBRMPA (2002).

5.2.1.3 Zoning plans

The primary method of regulating incompatible uses in the GBR is spatial separation by zoning. The uses of the GBR region are divided into one of three categories: fishing/collecting; recreation/tourism; and conservation/science. In determining zoning plans, the GBRMPA must regard the conservation value of the GBR, provide for the reasonable use and protection of the region, minimise the impacts of exploitation, reserve areas for aesthetic purposes, reserve areas in their natural state and determine the extent and sequence of buffer zones.⁷¹⁸ The recovery of minerals is strictly forbidden, except for scientific research purposes. The development of zoning plans takes around two years from initial preparation to approval by Parliament. There are seven stages to the development of a zoning plan:

1. information gathering on the nature and uses of the proposed area;
2. public participation period whereby comments from the general public are sought on the information gathered in stage one (30 days);
3. preparation of a draft plan, incorporating minimal regulations consistent with management arrangements and plans already in place;
4. public participation period whereby comments from the general public are sought on the draft plan (30 days);
5. consideration of public comment and plan finalisation;
6. adoption of the revised plan; and
7. submission of the plan by GBRMPA to the Minister for the Environment and Heritage for approval. If no move for disallowance is made within 15 Parliamentary sitting days, the plan is brought into force and the Minister announces the date the plan will come into effect.⁷¹⁹

The intended inflexibility of the statutory zoning plans makes them more robust to short-term political manipulation yet impractical for rapid response to environmental emergencies.⁷²⁰ Due to the debilitating nature of this inflexibility, a permitting system was established to deal with issues that cannot be anticipated in the zoning process, such as initiation of tourist operations, development of facilities such as tourist pontoons or resorts, aquaculture proposals and marinas. Area statements guide the issuance of permits by establishing the desired usage and management priorities for individual reefs in the context of the zoning plans. Reef use plans are site-specific, problem-oriented plans designed to deal with urgent changes required within the zoning plan system. It was an early policy notion that the GBRMPA should review zoning plans every five years, however, this has yet to

⁷¹⁸ Kenchington (1990).

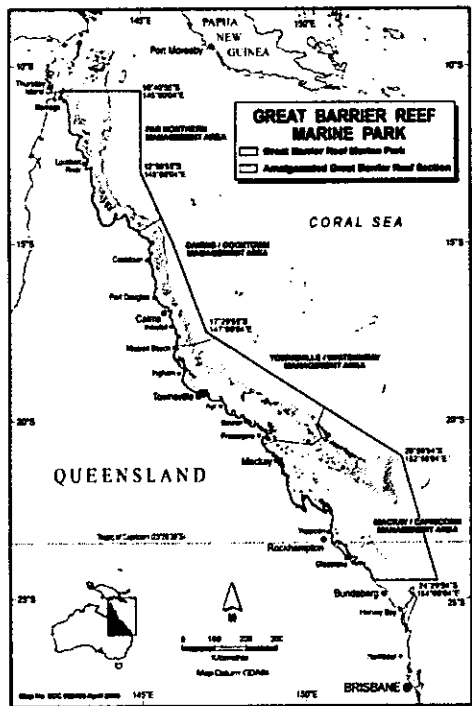
⁷¹⁹ GBRMPA (2002).

⁷²⁰ Kenchington (1990).

occur due to the lack of sufficient resources and the relatively short time interval between establishing the zone and proposed review.

Previous zoning plans were developed for the four sections of the GBRMP – the Far Northern, Cairns, Central and Mackay/Capricorn Sections – and resulted in less than 4.5% of the GBRMP being declared in Green Zones (or ‘no-take’).⁷²¹ In the late 1990s with advances in the scientific knowledge base and recognition of the importance of biodiversity, this zoning system was found to be inadequate in protecting the range of biodiversity in the Region. Therefore, the Representative Areas Program (RAP) commenced in 1998 to identify the major habitats and develop a new Zoning Plan based on the protection of a ‘representative’ sample of each habitat type (70 bioregions – including 30 reef and 40 non-reef bioregions) in a network of ‘no-take’ areas (33.3% of the GBRMP).⁷²² Coincidentally, also in 1998, the Gumoo Woojabuddee Section and 28 new coastal areas were incorporated into the GBRMP and thus required the timely development of an appropriate Zoning Plan.⁷²³

Figure 4 Map illustrating the amalgamated GBR area as included in the Great Barrier Reef Marine Park Zoning Plan 2003.



Source: GBRMPA. (2004). “Great Barrier Reef Marine Park Zoning Plan 2003.” Queensland: GBRMPA: 3.

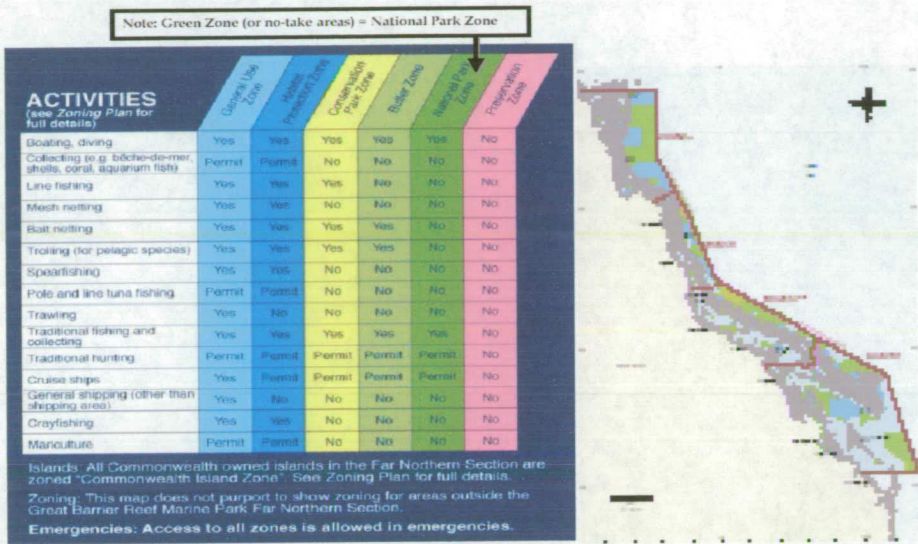
⁷²¹ GBRMPA. (2003). “The Great Barrier Reef Representative Areas Program – The Planning Process in Detail.” <http://www.gbrmpa.gov.au> [Access date: 28 April 2004].

⁷²² Day, J., Fernandes, L., Lewis, A., De’ath, G., Slegers, S., Barnett, B., Kerrigan, B., Breen, D., Innes, J., Oliver, J., Ward, T. and Lowe, D. (2000). “The Representative Areas Program for protecting biodiversity in the Great Barrier Reef World Heritage Area.” Proceedings of the Ninth International Coral Reef Symposium. Bali, Indonesia; and GBRMPA (2003) “The Great Barrier Reef Representative Areas Program...”

⁷²³ GBRMPA (2003) “The Great Barrier Reef Representative Areas Program...”

A Draft Zoning Plan for the amalgamated GBR Section (consisting of the original four sections and the new areas incorporated in 1998) was released in June 2003.⁷²⁴ The final Zoning Plan, taking into account public submissions, was tabled in Parliament by the Minister for Environment and Heritage on 3 December 2003 and came into effect on 1 July 2004.⁷²⁵

Figure 5 Final Zoning Plan for the amalgamated GBR under the RAP in accordance with the conservation zones and associated allowable activities (identified in the table to the left).



Source: GBRMPA. (2003). The Great Barrier Reef Representative Areas Program – The Planning Process in Detail.” <http://www.gbrmpa.gov.au> [Access date: 28 April 2004].

5.2.2 Emerald Agreement 1979

The Emerald Agreement came about in the context of negotiations of the OCS and Commonwealth insistence on retaining the boundaries established by the *Seas and Submerged Lands Act 1973*. It heralded the beginning of formal relations between the Commonwealth and Queensland Governments in an agreement on offshore jurisdictional issues in the GBR marine area. It was the first time support was shown for a cross-jurisdictional ministerial council to guide policy decisions.

The Emerald Agreement established:

- that the GBRMP Act was to be implemented without amendment;
- that Queensland was to produce complementary legislation;
- the role of the GBR Ministerial Council in coordinating policy;

⁷²⁴ GBRMPA (2003) “The Great Barrier Reef Representative Areas Program...”

⁷²⁵ GBRMPA (2003) “The Great Barrier Reef Representative Areas Program...”; and Kemp, D. (2004). “Historic Protection for the Great Barrier Reef.” Media Release for the Minister for the Environment and Heritage. 25 March 2004.

- that Queensland had day-to-day management responsibilities of the Capricornia Section (through an agreement known as the Basis of Agreement); and
- that the Ministerial Council has responsibility for endorsing and monitoring scientific research in the region.⁷²⁶

Despite the provisions of the Emerald Agreement, it took Queensland seven years before it implemented any complementary legislation. Contrary to the provisions of the Emerald Agreement, however, Queensland's legislation was not entirely complementary. Rather, the Queensland Government did not discount the possibility of oil drilling in the reef area under Queensland jurisdiction, despite being aware that the Commonwealth would never allow this activity to happen. Queensland's *Marine Parks Act 1982* contained provisions for implementing complementary zoning plans to reflect adjacent Commonwealth areas but its implementation placed little emphasis on conservation. This was arguably due to the fact that the Premier of Queensland was a member of the Great Barrier Reef Ministerial Council, which had the effect of placing strategic powers in the Premier's Department rather than the Queensland National Parks and Wildlife Services (NPWS) and reflected the pro-development attitude of the Queensland Government at the time.⁷²⁷

On 10 May 1988, the Main Agreement was signed to replace the Emerald Agreement.⁷²⁸ The Main Agreement was an extension of the Basis of Agreement, covering the entire marine park rather than just the Capricornia section, which formalised the intentions of both Governments. The Main Agreement, although not legally enforceable, also clarified the financial arrangements between Governments and the GBRMPA's responsibility for establishing policies relevant to the GBRMP.⁷²⁹ As a result of the Main Agreement, marine parks officers of the Queensland NPWS of the Queensland Department of Environment and Heritage, have primary responsibility for the day-to-day management of the GBRMP. Fifty per cent of funding for day-to-day management comes from the Commonwealth Government and the remaining fifty per cent comes from the Queensland Government. This funding is administered via a trust.

5.2.2.1 *Great Barrier Reef Ministerial Council*

The Great Barrier Reef Ministerial Council (GBRMC) meets annually with the goal of seeking complementary management regimes for Queensland and the Commonwealth at the ministerial level. It consists of four Ministers – two Queensland and two Commonwealth

⁷²⁶ Pitts, D. (1997). "Best Practice Mechanisms for Marine Use Planning. Australia's Oceans Policy." Hobart: National Oceans Office. **Issues Paper 3**.

⁷²⁷ Kriwoken (1991).

⁷²⁸ Pitts (1997).

⁷²⁹ Ibid.

Ministers. There is no reference in the Act to the Council, its objects, purpose and operations. It is essentially a high level administrative and political forum with a major function of achieving intergovernmental agreement on the program and budget of management of the GBRMP. The GBRMC has no legal recourse to ensure relevant jurisdictional issues are brought to the meetings, however, there is no inhibition if Ministers agree to place an item on the agenda of a meeting. The core function of the GBRMC is oversight of policy and budgetary arrangements for the day-to-day management the GBRMP. The Commonwealth has ultimate power, and when the State is not represented at the whole of government level, a logical tendency is for unilateral Commonwealth decision-making in the GBRMP area, highlighting the potential to undermine intergovernmental relations.

5.2.3 How are integration and conflict dealt with in this NRM model?

The GBRMP management is difficult to assess for its overall capacity for integration. While it incorporates a sophisticated capacity for cross-jurisdictional integration (Level 7 on the Policy Integration Scale – see Section 1.2.1), in the sense that the inter-governmental GBRMPA controls parameter setting through spatial zoning of uses, sectoral uses continue to be managed independently with interaction generally managed through the GBRMPA (Level 1 on the Policy Integration Scale). For some sectoral interactions, however, two-way information exchange processes are incorporated through MoUs or other informal agreements to overcome apparent and potential conflicts, indicating a more advanced capacity for integration at the operational level. Overall, the GBRMP is managed in terms of being *not inconsistent* rather than proactively integrated, a pattern reflected in other Australian NRM models. Specific aspects of the GBRMP model, however, do work particularly well in addressing cross-jurisdictional and cross-sectoral integration and conflict management, some of which are discussed below.

The GBRMPA and GBRMC offer opportunity for cross-jurisdictional coordination between Queensland and the Commonwealth through joint management of the GBRMP area. Through management capacity, trust, shared objectives and mutual confidence, cross-jurisdictional issues may be addressed within these forums. The GBRMC works well when both Governments use it to its full potential, but fails when either one sees it as opportunity to play political power games over jurisdictional responsibilities. Cross-jurisdictional integration can occur for issues brought to the GBRMC table, but there is no mechanism other than decisions of the Chair or of the Council itself for actually bringing issues to the Council.

This coordination is weakly reflected by the eventual implementation of complementary Queensland legislation to the GBRMP Act, however, it is unlikely that further legislative provisions would effect cross-jurisdictional integration. Despite these mechanisms for cross-jurisdictional coordination, there are no legal mechanisms, other than the power to make regulations under S 66 (2) (e) of the GBRMP Act, for integration with terrestrial or adjacent area management.⁷³⁰ The Great Barrier Reef Consultative Committee and the range of regional and subject specialist advisory Committees operated by GBRMPA provide consultation channels, which can be very effective in achieving solutions, across the ecologically imaginary lines that form jurisdictional boundaries.

The GBRMPA manages the GBRMP as a whole and as such must coordinate cross-sectoral interests through the development of zoning plans. The GBRMPA essentially acts as a coordinating body ensuring guidelines of individual sectors do not compromise the integrity of the GBRMP in achieving its objectives under the GBRMP Act. Intra-sectoral integration generally remains outside the scope of the GBRMPA, with a few exceptions whereby MoUs between individual sectors/sub-sectors and the GBRMPA can be developed. The zoning plans themselves, however, are not mechanisms for cross-sectoral integration as they involve a separation of uses according to their perceived impact rather than an integrated management approach. In this respect, zoning plans act as conflict management tools that also harmonise human activity with conservation requirements.

The GBRCC also offers opportunity for cross-sectoral integration through the endorsement and involvement of various interests, albeit government-selected and advisory in nature. Community involvement is encouraged through the establishment of Marine Resource Advisory Committees and public education outreach programs run by GBRMPA. Public participation also features as a significant component in the development of zoning plans and, through the RAP, has resulted in the most submissions received yet by the GBRMPA through any public consultation process to date.

5.3 Murray-Darling Basin Agreement

The Murray-Darling Basin Initiative (the Initiative) represents a coordinated, cross-jurisdictional partnership across six governments, in cooperation with the Basin community, which has been established to give effect to the *1992 Murray Darling Basin Agreement* (the Agreement).⁷³¹

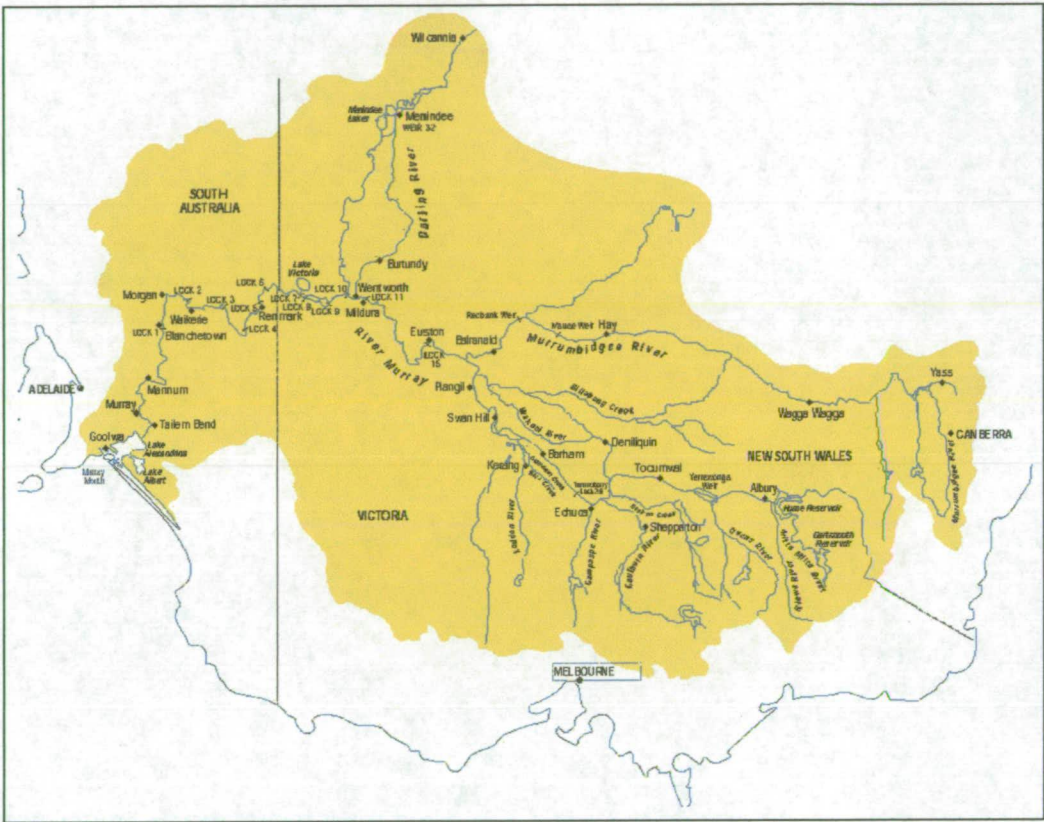
⁷³⁰ Kenchington, R. and Crawford, D. (1993). "On the meaning of integration in coastal zone management." *Ocean & Coastal Management*, 21: 109-127.

⁷³¹ Commonwealth of Australia. (1992). "Murray-Darling Basin Agreement 1992." Canberra.

The purpose of the Agreement is:

to promote and coordinate effective planning and management for the equitable, efficient and sustainable use of water, land and other environmental resources of the Murray Darling Basin.⁷³²

Figure 6 Map illustrating the interdependence of states based on the complex and far reaching River Murray system.



Source: Murray-Darling Basin Commission. (2004). "The River Murray System." http://www.mdbc.gov.au/river_murray/river_murray_system/river_murray_system.htm [Access date: 7 July 2004].

The Agreement was signed by the Commonwealth, New South Wales, Victoria and South Australia in 1992 and was adopted with the passing of the *Murray-Darling Basin Act 1993* in each jurisdiction.⁷³³ Queensland joined in 1996 upon signing the Agreement, and the Australian Capital Territory became a member through a MoU in 1998. The Agreement focuses on water entitlements for South Australia, Victoria, New South Wales, Queensland and the ACT. It also covers the procedures to be followed for natural resource management, water distribution, asset management and financial disbursements relating to the natural resource of the Basin.

⁷³² Murray-Darling Basin Commission. (2001). "Annual Report 2000-01." Canberra: MDBC: 6.
⁷³³ Commonwealth of Australia. (1993). "Murray-Darling Basin Act 1993" (as amended); and Murray-Darling Basin Commission. (2001). "The Murray-Darling Basin Initiative 2001." Canberra: MDBC; see also Murray-Darling Basin Commission website. <http://www.mdbc.gov.au>.

The Act establishes new institutions for natural resource management in the Murray-Darling Basin at the political, bureaucratic and community levels and describes their objectives, functions and composition. Governance of the Initiative is through:

- the Murray-Darling Basin Ministerial Council (MDBMC or the Council) – the political decision-making forum;
- the Murray-Darling Basin Commission (MDBC or the Commission) and its Office – the executive arm which advises the Council and implements its decisions; and
- the Community Advisory Committee (CAC) – which advises the Council and facilitates communication between the community and the Council/Commission.⁷³⁴

5.3.1 *Murray-Darling Basin Ministerial Council*

The Murray-Darling Basin Ministerial Council (the Council) is responsible for providing the policy and direction needed to implement the Initiative.⁷³⁵ Its main functions are to consider and determine major policy issues concerning the use of the Basin's land, water and other environmental resources, and to develop and authorise measures to achieve the purpose of the Agreement (see Box 1).

The Council meets at least twice per year and comprises the Ministers holding land, water and environmental portfolios within the Governments of New South Wales, Victoria, South Australia, Queensland and the Commonwealth. Up to three Ministers from each Government may sit on the Council. One ACT Government Minister also participates on a non-voting basis, allowing the ACT to take part in planning and management of the Basin environmental resources, but not the management of the waters of the River Murray system.

Many of these Ministers also sit on other related Ministerial Councils such as the Natural Resources Management Ministerial Council. Further, the work of the Council complements the water reform policy agenda of COAG. In addition, Council representation is broader than natural resources management with many Ministers responsible for portfolios such as agriculture, fisheries, forestry and in some cases, oceans policy and urban as well as rural water resources issues. There is, therefore, the potential for a much more integrated approach to sustainability through the Initiative.

⁷³⁴ Commonwealth of Australia (1992) "Murray-Darling Basin Agreement 1992"; and Murray-Darling Basin Commission (2001) "Annual Report 2000-01"

⁷³⁵ Ibid.

Box 1**Role of the Murray-Darling Basin Ministerial Council**

The Murray-Darling Basin Ministerial Council determines policies and authorises planning and management of natural resources for the benefit of the Basin. Council also manages the River Murray flow, water regulating structures, water allocation and accounting. The Commonwealth, State and Territory governments covering the Basin through the Council, work together in a unique partnership with the community to respond to issues requiring:

- joint government action; or
- action by an individual State or Territory but which could have implications across the Basin.

This relationship is based on:

- maintaining sufficient trust to share the natural wealth equitably;
- exercising core responsibilities for water resource sharing, water quality protection and river operations with efficiency; and
- adding value to the pursuit of sustainable resource use, by the agreement of governments, under principles of integrated catchment management.

Source: Murray Darling-Basin Commission. (unpublished). "Role of the Murray-Darling Basin Ministerial Council." Internal MDBC document being finalised for publication, 2003: 1.

5.3.2 Murray-Darling Basin Commission

The Murray-Darling Basin Commission (the Commission) is responsible for managing the River Murray and the Menindee Lakes System of the lower Darling River, advising the Council on matters relating to the Initiative and developing and implementing policies and measures for the equitable, sustainable use of the Basin's natural resources.⁷³⁶ It is an autonomous organisation equally responsible to all participating Governments and to the Council itself.

The Commission comprises an independent president selected by the Council after receiving advice from the Commissioners. The Governor-General (in the case of the Commonwealth representatives) and the Governor (of each of the respective states) select two Commissioners and two Deputy-Commissioners from each of the participating Governments for a five-year appointment period. The Council then selects one of these Commissioners to be the Deputy President. The ACT has one non-voting representative and the chair of the Community Advisory Committee attends meetings. The Commission is also advised by high-level project boards and committees and is supported by the Office of the Commission.

⁷³⁶ Murray-Darling Basin Commission (2001) "Annual Report 2000-01"

5.3.3 *Community Advisory Committee*

The Community Advisory Committee (CAC) represents the wider Basin community and provides the medium for two-way communication between the community and the Council/Commission.⁷³⁷ Its role is to advise the Council and Commission on natural resource management issues referred to them by the Council or Commission and to present views of the Basin's community on these issues. The CAC comprises an independent chair and 28 members including: one representative from each of five special-interest organisations (the National Farmers Federation, the Australian Conservation Foundation, the Australian Local Government Organisation, the Australian Landcare Council, and the Indigenous Land Corporation); and 23 regional representatives (9 NSW, 5 Vic, 4 SA, 4 Qld, 1 ACT).⁷³⁸ The Council sets nomination guidelines and requirements of the Committee. The chair attends the Council and the Commission meetings.

5.3.4 *How are integration and conflict dealt with in this NRM model?*

The very machinery of the Initiative and the complexity of the issues in the Basin foster an inter-governmental and inter-agency approach. The pursuit of sustainable resource use and management requires a holistic and cross-sectoral approach to management. In addition, the central decision-making body comprising all primary impacted governments to establish joint agreement on water use and management, gives this model a high capacity for overall integration, nearing a Level 8 on the Policy Integration Scale (see Section 1.2.1). Some specific aspects of this model, which are detailed below, address integration issues particularly well and others show potential to undermine its overall function.

The Agreement is primarily a cross-jurisdictional Agreement with legislative backing by each of the contracting Governments. While the Council and the Commission are the primary decision-making bodies for the Basin-wide policies and approaches, day-to-day management of the Basin's resources remains the responsibility of various jurisdictions within each of the contracting Governments. In addition, each State has its own policies and approaches to natural resources management, which could undermine the Basin-wide intent of the Commission and Council, although this would defeat the purpose of establishing cooperative arrangements in the first place.

The Council and Commission offer opportunity for vertical cross-jurisdictional integration, through representation of different levels of government (that is, federal and state). They also offer opportunity for horizontal cross-jurisdictional integration, through representation

⁷³⁷ Murray-Darling Basin Commission (2001) "Annual Report 2000-01"

⁷³⁸ Ibid.

of different jurisdictions on boards and committees (that is, Commonwealth, NSW, SA and Vic). Local level government has the opportunity to enter into negotiations through representation on the CAC.

A government-community approach is actively supported through the Initiative's programs and is the basis for the sharing of concerns and effort, joint development of more integrated policies and programs, and coordinated planning and management. The CAC plays an important role in fostering cross-sectoral integration, consultation and planning. Its powers are, however, limited by only having chair representation at the decision-making forums and by only having government-appointed members, which could lead to bias and mistrust if driven by short-term political considerations.

5.4 Tasmanian Regional Forests Agreement

5.4.1 National Forests Policy Statement 1992

The *National Forests Policy Statement 1992* (NFPS) was a response to conflicting forest management objectives involving the environmental value of forests that was fought for by the Commonwealth versus the growing forest industry fought for by state governments.⁷³⁹ It defines eleven broad national goals for forest management, including a commitment to conservation, wood production, plantation development and international obligations.⁷⁴⁰ Regional Forest Agreements (RFAs) are the implementing instruments of the NFPS and are negotiated following a process set out in the NFPS:

- *Scoping Agreement* – identifies government and regional obligations, interests in and uses of the forest resources;
- *Comprehensive Regional Assessments* – full audit of the uses of the forest resources (environment and heritage assessment & social and economic assessment) – designed to develop a Comprehensive, Adequate and Representative (CAR) reserve system, formulate Ecologically Sustainable Forest Management (ESFM) practices and set logging levels;
- *Forest Resource Use Options* – impact assessments carried out on each forest resource use option allowing the most appropriate management option to be selected; and
- *RFA negotiation* – includes duration, implementation mechanisms and options for review.⁷⁴¹

⁷³⁹ Slee, B. (2001). "Resolving production-environment conflicts: the case of the Regional Forest Agreement Process in Australia." *Forest Policy and Economics*, 3: 17-30.

⁷⁴⁰ Commonwealth of Australia. (1992). "National Forest Policy Statement – A New Focus for Australia's Forests."

⁷⁴¹ Ibid.

5.4.2 Regional Forests Agreements

RFAs are 20-year inter-governmental agreements, which are made between federal and state authorities to govern forest use and conservation in designated forest areas. A RFA defines the tasks of forest management, establishes guidelines for sustainable use in accordance with the NFPS and assigns future forest management responsibilities to the relevant authorities. The process of making RFAs is subject to assessment under the *Environment Protection (Impact Proposals) Act 1974* (Cth), which has been subsumed within the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). Under the EPBC Act, forestry operations in a region covered by a negotiated RFA do not require environmental approval.⁷⁴²

5.4.3 CAR reserve system

In accordance with the NFPS, a CAR reserve system is established as part of a RFA. This system is based on a set of national criteria and indicators for the conservation of biodiversity, old-growth and wilderness forest areas. These criteria were established by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-Committee (JANIS), hence are referred to as the JANIS criteria. The JANIS criteria are:

- 15% of the pre-1750 distribution of each forest ecosystem should be protected;
- 60% of vulnerable or old-growth forest ecosystems should be protected;
- all rare or endangered forest ecosystems should be protected;
- dedicated reserves need to be replicated as insurance against natural disaster;
- 90% or more high quality wilderness should be protected in reserves;
- protection of Indigenous and European heritage value is essential;
- industry access security outside reserves is important; and
- overall RFAs aim to develop sustainable management of the whole forest area, inside and outside reserves.⁷⁴³

5.4.4 The Tasmanian RFA

The Tasmanian RFA (TRFA) is an inter-governmental agreement signed by both the State of Tasmania and the Commonwealth in 1997. To this end the State and the Commonwealth have agreed to establish a framework for the management and use of Tasmanian forests, which seeks to implement effective conservation, forest management and forest industry practices.

⁷⁴² *Environment Protection and Biodiversity Conservation Act 1999* (Cth), s.39.

⁷⁴³ Commonwealth of Australia. (1997). "Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia." A report by the Joint ANZECC/MCFFA NFPS Implementation Sub-committee.

Tasmania, like other states and territories entering into RFAs, has implemented legislation that allocates forestland tenures and specifies the administrative framework and policies within which public and private forests are managed. The Tasmanian *Regional Forests Agreement (Land Classification) Act* was passed in 1998 to classify land pursuant to the TRFA, which amends the *Forest Act 1920*, the *National Parks and Wildlife Act 1970* and the *Crown Lands Act 1976*. The *Forest Practices Act 1985* (Tasmania) and Forest Practices Code, the use of environmental management systems, and the State-wide NRM framework are the primary tools for ESFM.

The TRFA established guiding principles and management practices for Tasmania's private and public forests. The TRFA is based on the vision, goals and objectives of the NFPS and:

- establishes a CAR Reserve System (meeting the JANIS criteria) on private land (through the RFA Private Forest Reserve Program) and public land – providing the bridge to ESFM;
- develops and implements ESFM and use, encompassing integrated NRM, a policy on maintaining a Permanent Forest Estate and management based on sustainable yields – providing the bridge to industry development; and
- facilitates the development of an internationally competitive native and plantation wood production and wood products industry, comprising social and economic development at a regional level.⁷⁴⁴

Forestry Tasmania (industry-based) manages approximately 40% of Tasmanian forests; the State Department of Primary Industries, Water and Environment (DPIWE) manages approximately 30% as conservation reserves; and the remaining 30% of Tasmanian forests is either not managed, kept for conservation or private forests, which is managed for grazing or water.⁷⁴⁵ While the TRFA establishes the guiding principles for forest management, each of these departments or organisations manage their area of forest in accordance with different objectives. Effectively these organisations act as different intra-sectoral forest interests.

Forestry Tasmania has achieved ISO 14001 certification of its environmental management system.⁷⁴⁶ In doing so, its objectives are geared towards wealth generation, developing a competitive industry, but also includes public services such as nature conservation and

⁷⁴⁴ Commonwealth of Australia & The State of Tasmania. (1997). "Tasmanian Regional Forest Agreement"; and Resource Planning and Development Commission. (2002). "Inquiry on the Progress with Implementation of the Tasmanian Regional Forest Agreement (1997)." Hobart: Artemis Publishing Consultants. December 2002.

⁷⁴⁵ Orr, S. and Gerrard, A.M. (1998). "Management Decision Classification: A System for zoning land managed by Forestry Tasmania." *Tasforests*, 10: 1-14.

⁷⁴⁶ Resource Planning and Development Commission (2002) "Inquiry on the Progress..."

recreation.⁷⁴⁷ The management objectives for the DPIWE in public reserve management, on the other hand, are predominantly based on the non-consumptive conservation value of the resources.⁷⁴⁸

The Private Forest Reserve Program is a DPIWE program established with a \$30 million commitment from the Commonwealth Government to establish the private forest reserve system in Tasmania in accordance with the CAR reserve commitment under the TRFA.⁷⁴⁹ Landowner participants are offered a number of incentives, including financial incentives, should their land be proven suitable for management under the Program. Lump-sum, up-front payments and regular management payments are available if a covenant is placed on the Land Title and the forest managed in accordance with a Management Agreement.⁷⁵⁰ Regular management payments, but no up-front payment is available if the landowner will not place a covenant on the land title, but will manage the forest in accordance with a Management Agreement.⁷⁵¹ And if the landowner is not interested in either option, in the case of forests of the highest conservation value, there is the possibility of purchasing the land.

Private Forests Tasmania is a Tasmanian Government authority established under the *Private Forests Act 1994* to promote the development of private forestry in Tasmania. Its objectives are to assist and educate landowners and investors on the appropriate management of forests on private land, including advising on plantation developments, farm forestry, sustainable forest practices and promoting forestry research.⁷⁵²

In striving to meet their individual objectives these organisations and programs have collectively contributed to the (arguably) successful implementation of the TRFA. To this end the Resource Planning and Development Commission (the Commission) produced a Final Recommendations Report on the *Inquiry on the Progress with Implementation of the Tasmanian Regional Forest Agreement (1997)* in December 2002.⁷⁵³ The purpose of the review was not a renegotiation of the TRFA, but rather an opportunity for stakeholders and the general public to comment on management arrangements. The findings of this Report indicated that 78 of the 90 specified commitments or milestones of the TRFA identified in

⁷⁴⁷ Orr and Gerrand (1998).

⁷⁴⁸ Parks & Wildlife Services Tasmania. (2004).

<http://www.parks.tas.gov.au/manage/parksres/reserves.html> [Access date: 10 June 2004].

⁷⁴⁹ Private Forest Reserves Program. "Private Forest Reserves Program – A Voluntary Program to Protect Native Forests on Private Land in Tasmania." Brochure. Hobart: PFRP.

<http://www.pfrp.tas.gov.au/downloads/brochure.pdf> [Access date: 10 May 2004].

⁷⁵⁰ Ibid.

⁷⁵¹ Ibid.

⁷⁵² Private Forests Tasmania. (2003). <http://www.privateforests.tas.gov.au/> [Access date: 1 July 2004].

⁷⁵³ Resource Planning and Development Commission (2002) "Inquiry on the Progress..."

the Commission's Terms of Reference have been completed or substantial progress has been made. Another eight showed some progress and four had no progress, with three of those four being with the knowledge and consent of the signatory Parties.⁷⁵⁴ It was noted that much of the criticism of the TRFA stemmed not from the implementation of the Agreement, but rather with the specifics of the Agreement itself and as such lay outside the Terms of Reference of the Commission's inquiry. Despite the favourable review of the implementation of the TRFA, the Commission provided an extensive list of recommendations to fine tune some of the processes and address the concerns and criticisms of the public.

5.4.5 *How are integration and conflict dealt with in this NRM model?*

Despite an overall framework for the integration of forest practices, operational management remains the responsibility of individual sectors, which must operate *not inconsistently* with the overarching TRFA. Therefore, this model illustrates a capacity for Level 4 'negative' integration on the Policy Integration Scale (see Section 1.2.1), but has been compromised by some of the detailed political and participative processes as describe below.

Although the State is responsible for management of a majority of forests in Tasmania, the Commonwealth is bound to consistency with the State in its approach to forest management on Commonwealth land in Tasmania. This includes several RFA reserves as well as forests used for logging. In this sense, cross-jurisdictional coordination is achieved through Commonwealth action.

The RFA process requires that the full range of uses, users and values be taken into account in the planning and decision-making encapsulated in the final agreement. The TRFA failed in achieving true cross-sectoral consultation as only a few stakeholders were involved in the actual decision-making process and ultimately the decisions were made by politically influenced high-level bureaucrats, that often overlooked the values of large stakeholder groups in order to retain political support.

Cross-sectoral integration is alluded to in the TRFA in terms of a holistic approach to management that incorporates conservation, forest management and forest industry practices. However, the actual management and cross-sectoral arrangements are left for the specific management agencies to negotiate, with minimal public reporting and public consultation required.⁷⁵⁵ There are few mechanisms stipulated in the objectives of the individual management bodies – Forestry Tasmania, DPIWE or Private Forests Tasmania – to engage

⁷⁵⁴ Resource Planning and Development Commission (2002) "Inquiry on the Progress..."

⁷⁵⁵ See: TRFA. (1997). "Attachment 11: Public Reporting and Consultative Mechanisms."

in cross-sectoral management, but each organisation has to follow the guiding principles of the TRFA in managing its allocated forest resources.

5.5 Spencer Gulf Marine Plan

5.5.1 Marine planning in South Australia

Marine planning in South Australia is a key initiative of the South Australian Government's *Our Seas and Coasts: A Marine and Estuarine Strategy* (the Strategy), which was released in 1998.⁷⁵⁶ This initiative comes under one of five commitments made in the Strategy – the 'sustainable use' commitment for an ecosystem-based management approach for the marine environment.⁷⁵⁷ Marine planning originally aimed to resolve conflicts between stakeholders and users of the marine environment by zoning for the range of stakeholders. It soon became apparent, however, that the conflicts between commercial and recreational users were unresolvable and that excluding the general public using lines on maps was not practical.⁷⁵⁸ Therefore, the new aim of marine planning became zoning for the conservation and protection of the marine environment without excluding industry growth and development.⁷⁵⁹

Building on the *Our Seas and Coasts: A Marine and Estuarine Strategy*, the South Australian Government has developed a *Living Coast Strategy* (the LC Strategy) to assist in the achievement of ecologically sustainable development, ensuring the long term productivity and conservation of the marine, coastal and estuarine areas, by providing for integration of the use and management of coastal and marine environments.⁷⁶⁰ The LC Strategy is a whole-of-government environmental initiative that will identify gaps in current management arrangements and propose strategies to address these gaps.⁷⁶¹ The LC Strategy will reinforce the Government's commitments for the establishment of a Marine Planning Framework and a Representative System of Marine Protected Areas (MPAs).

A new *Coastal and Marine Management Act* is also currently under development as a coordinating mechanism, under which Marine Plans may sit in the future.⁷⁶² In the interim,

⁷⁵⁶ Department for Environment and Heritage. (2002). "Marine Planning." <http://www.environment.sa.gov.au/coasts/planning.html> [Access date: 15 February 2002].

⁷⁵⁷ Department for Environment and Heritage. (2001). "Spencer Gulf Marine Plan - Newsletter." Update Issue No. 1: October 2001.

⁷⁵⁸ Interview with subject XU11.

⁷⁵⁹ Ibid.

⁷⁶⁰ Department for Environment and Heritage. (2003). "Marine Conservation Programs." <http://www.environment.sa.gov.au/coasts/conservation.html> [Access date: 10 May 2004].

⁷⁶¹ Government of South Australia. (2004). "Findings from the 2003 State of the Environment Report." <http://www.environment.sa.gov.au/reporting/coast/health.html> [Access date: 12 May 2004].

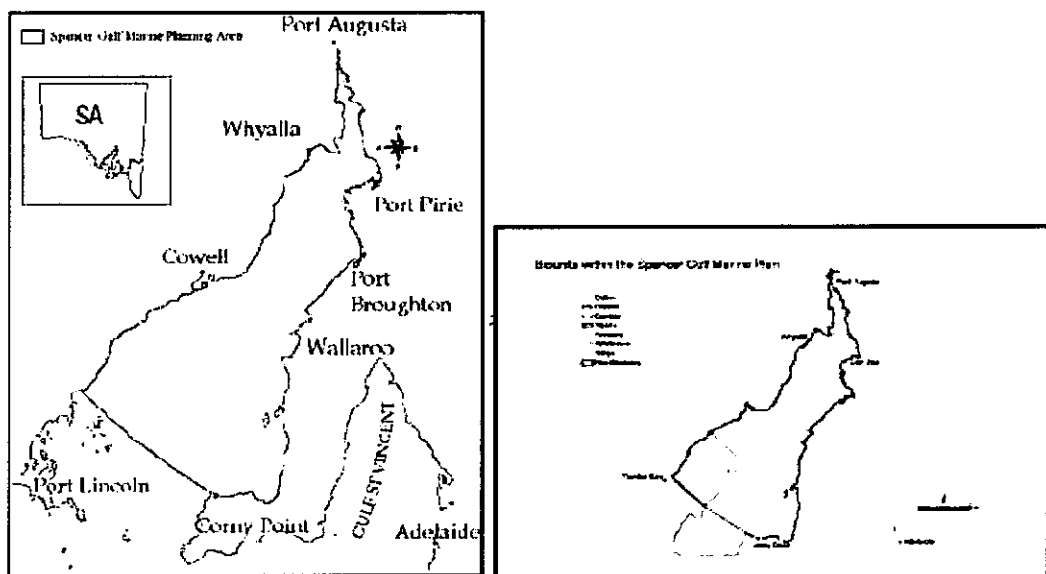
⁷⁶² Caton, B. (2002). "States Symposium, 'The Good, The Bad and The Ugly': Contribution from South Australia." Coast to Coast Conference Proceedings. Tweed Heads, NSW: 4-8 November 2002; and Interview with subject XU11.

the ministerial Plan Amendment Report (PAR) will be used to get the Spencer Gulf Marine Plan recognised under the *Development Act 1993*, within a Development Plan for “Land not within a Council area (Coastal waters)”.⁷⁶³ However, this Act only guides development and not the actions of everyday people that may be affected by, or affect, the Marine Plan implementation process outside any development processes, hence in the interim the Marine Plan holds no real statutory authority.⁷⁶⁴

Eight bioregions have been identified in South Australian waters at a scale of 1,000 km² that reflect similar patterns of diversity within.⁷⁶⁵ These bioregions contain many smaller marine biounits at a scale of 100 km² that similarly reflect patterns of biodiversity at a smaller scale. The Spencer Gulf Marine Plan encompasses two of these bioregions.⁷⁶⁶ It was approved in February 2001 as the pilot Marine Plan, the first of six Marine Plans planned for South Australian waters.

5.5.2 *Spencer Gulf Marine Plan*

Figure 7 Spencer Gulf Marine Planning Area (left) and Spencer Gulf Biounits (right).



Source (Spencer Gulf Map):

Department of Environment and Heritage. (2001). “Spencer Gulf Marine Plan.” Update Issue No. 1. October 2001.
<http://www.environment.sa.gov.au> [Access date: 20 April 2003]

Source (Biounits Map):

Boxall, V., Paxinos, R., Emmett, J., Wright, A., Smolinski, J., von Baumgarten, P. and Best, L. (2004). “The South Australian Marine Planning Framework.” Coast to Coast Conference Proceedings. Hobart: 19-23 April 2004.

⁷⁶³ Interview with subject XU11.

⁷⁶⁴ Ibid.

⁷⁶⁵ Boxall, V., Paxinos, R., Emmett, J., Wright, A., Smolinski, J., von Baumgarten, P. and Best, L. (2004). “The South Australian Marine Planning Framework.” Coast to Coast Conference Proceedings. Hobart: 19-23 April 2004.

⁷⁶⁶ Ibid.

Stage one of the Spencer Gulf marine planning process involved extensive regional briefings with relevant local and State Government agencies and regional development boards.⁷⁶⁷ Once local governments were engaged, informal meetings with peak stakeholder groups and the wider public were held to identify their values and uses in the gulf area.⁷⁶⁸ The resultant *Focus* document provides a regional perspective of the Spencer Gulf drawing on definitive recorded and verifiable data incorporating 71 Geographical Information Systems (GIS) spatial layers of information collated into 931 planning units (5km x 5km grids).⁷⁶⁹ The spatial layers include information on the economic, cultural, social and environmental values found in the Spencer Gulf.⁷⁷⁰

Each of the 931 planning units were then analysed according to a set of ecological criteria relating to the contribution of species, habitats and ecological processes to the functioning of the whole marine ecosystem.⁷⁷¹ The planning units were then grouped into one of four ecologically rated (ER) zones:

- ER1 zones are *critical* zones incorporating nursery areas and seagrass habitats;
- ER2 zones are *essential* habitats;
- ER3 zones are *contributing* habitats that are generally more robust to impacts; and
- ER4 zones need a *precautionary approach* to management due to the lack of information known about the area.⁷⁷²

It is anticipated that as knowledge and research in the area increases, all ER4 zones will be classified into one of the ER1-ER3 zones. Based on these classifications and closely related to this process, but run by a separate departmental section, is the Representative System of MPAs program which comes in after the marine planning process and analyses areas of representative protected area importance at a finer scale of 1km x 1km grid squares.⁷⁷³

Once ER zones have been identified and classified, the next step in the process is to develop a Marine Plan. The Marine Plan contains:

- a series of maps summarising ecological, economic and social values;
- a map summarising current impacts on those values;
- an ER zoning map;
- the definitions, goals, objectives and strategies for ER zones 1-4;

⁷⁶⁷ Fuller, S. (2002). DEH: Personal Communication – 19 February 2002.

⁷⁶⁸ Department for Environment and Heritage (2002) "Marine Planning"

⁷⁶⁹ Boxall *et al* (2004); and
Interview with subject XU11.

⁷⁷⁰ Boxall *et al* (2004).

⁷⁷¹ Ibid.

⁷⁷² Interview with subject XU11.

⁷⁷³ Ibid.

- a description of ER zone locations for each biounit, containing information on habitat, uniqueness and reason for zoning; and
- information on the current impacts and conservation areas within each ER zone.⁷⁷⁴

The Marine Plan does not seek to control the day-to-day management of the marine and estuarine activities, but rather it seeks to integrate the regulation of different activities, with the day-to-day management remaining the responsibility of the relevant authority.⁷⁷⁵ As such, the success of the Marine Plan depends on the 'whole-of-government' and community approach towards implementation and compliance.

5.5.2.1 *Institutional arrangements*

A Marine Planning Team, housed in the Coast and Marine Branch of the Department for Environment and Heritage, is the lead agency established to act on behalf of the 'whole-of-government' to zone State waters for multiple-uses compatible with the ER zoning process.⁷⁷⁶ The Government Agency Steering Committee oversees the Marine Planning Team in an advisory capacity and also contributes to a 'whole-of-government' approach.⁷⁷⁷ The Steering Committee is made up of the heads of involved Government departments, including the Chief Executive of the Department for Environment and Heritage, Primary Industries and Resources SA (PIRSA), the Department of Water, Land and Biodiversity (DWLBC) and the Local Government Association.⁷⁷⁸ The Steering Committee is charged with oversight of, not only the marine planning process, but also the MPA program.⁷⁷⁹ It is designed to guide the process, but in practice it merely signs off on the Marine Planning Team's work, which is also important given their role in coordinating implementation on an integrated front down track.⁷⁸⁰

The State Government Marine Managers Forum was established as an inter-departmental committee in 1999. It includes representatives from all State Government departments with an interest in marine issues and marine management.⁷⁸¹ The primary aim of this body is to reduce the potential for conflict and difficulties associated with cross-agency responsibilities

⁷⁷⁴ Boxall *et al* (2004).

⁷⁷⁵ Ibid.

⁷⁷⁶ Caton (2002).

⁷⁷⁷ Interview with subject XU11.

⁷⁷⁸ Boxall, V. (2004). DEH: Personal Communication – 12 May 2004.

⁷⁷⁹ Department for Environment and Heritage. (2002). "Spencer Gulf Marine Plan - Newsletter." Update Issue No. 3: October 2002.

⁷⁸⁰ Boxall, V. (2004). DEH: Personal Communication – 12 May 2004.

⁷⁸¹ Government of South Australia (2004) "Findings from the 2003..."

a well as providing an informant's role in the development of State Government marine-related policies and research priorities.⁷⁸²

The Spencer Gulf Regional Consultative Committee (the Committee) was formed in 2002 to aid community consultation and participation efforts by appointing locals with knowledge to impart, in an advisory capacity.⁷⁸³ One member of the Committee was appointed from the Marine Advisory Committee and one person appointed from the Technical Advisory Committee.⁷⁸⁴ The remaining ten of the twelve individuals were publicly nominated, but appointed by the Minister for Environment and Conservation on the advice of the Steering Committee, to contribute technical expertise, advice and local knowledge to the development and implementation of the Spencer Gulf Marine Planning process and to advise on the values and desires of the general public.⁷⁸⁵ Members of the Committee come from a diverse range of community interests including commercial fishing, recreational fishing, boating, marine ecology, local government, aquaculture, indigenous issues, economic development and conservation. The Committee meets regularly with the Marine Planning Team to discuss each step of the development of the marine plan.

5.5.3 *How are integration and conflict dealt with in this NRM model?*

The South Australian marine planning process is working towards conservation zoning and multiple-management of uses within these zones. At present, however, it is in the developmental stages and the process lacks the legislative support required to effectively manage for the integration of uses. This model is approaching a Level 6 on the Policy Integration Scale, whereby the 'whole-of-government' approach is being adjudicated by the Marine Planning Team until such time a legislative authority gives it the power to plan with other departments and agencies for the integration of uses through ER zones. Consultation and stakeholder participation are the primary tools used to enhance this model's capacity for integration, some processes which have been described in more detail below.

Cross-jurisdictional integration was dealt with early on through a briefing tour, whereby relevant local and State Government agencies and regional development boards were consulted and given the opportunity to raise concerns and issues before taking the 'whole-of-government' planning framework to the public for further consultation. By getting this initial sign on from other levels of government and other agencies before presenting it to the public, South Australia effectively by-passed the jurisdictional and sectoral suspicions

⁷⁸² Government of South Australia (2004) "Findings from the 2003..."

⁷⁸³ Boxall, V. (2004). DEH: Personal Communication – 12 May 2004.

⁷⁸⁴ Department for Environment and Heritage. (2004). "Terms of Reference - Marine Planning Regional Consultative Committees." Personal Communication – V. Boxall. 12 May 2004.

⁷⁸⁵ Department for Environment and Heritage (2002)...Update Issue No. 3: October 2002.

occurring with the Commonwealth RMP process. There is a risk in presenting a proposed policy or process to the public before having all affected levels of government and agencies within government buy into the process; as any breakdown in a 'whole-of-government' approach that is in public view can cause a breakdown in trust and confidence in the government itself, effectively rendering the proposal obsolete before it begins.

The original analysis upon which ER zones is based includes economic, social, cultural and environmental values and uses. The resultant Spencer Gulf Marine Plan should therefore achieve a high level of cross-sectoral integration. However, this analysis is based on definitive recorded and verifiable data only. This means that qualitative and cultural values may be compromised if they were not recorded or easily and readily defined, hence compromising the cross-sectoral nature of the marine planning process.

While there appears to be advanced institutional arrangements with respect to cross-sectoral integrative approaches incorporated in the Steering Committee and Marine Managers Forum for instance, coordination appears to be compromised at the operational level between this marine planning process and other policies and programs, such as the MPA program and with policies and programs of jurisdictions outside State boundaries, such as the Commonwealth's RMP process.⁷⁸⁶ Although coordination may be happening at different levels of government, in South Australia at least, there is a distinct breakdown in interagency and intra-jurisdictional communication that is counterintuitive to the overall Government objective of integrated management.⁷⁸⁷

There is a community-based forum for consultation, the Spencer Gulf Regional Consultative Committee, in the marine planning process that was developed through a public nomination process. Actual appointment of nominees was by the Minister and the body itself is limited to an advisory role. In the initial stages the Committee approached the task with caution, arguably because it was unclear of its role and what marine planning meant for South Australia. However, with time it appears that the group has gained the confidence of both Government and the public and are now a very powerful entity in themselves. It is perhaps a good lesson to make sure the Terms of Reference in establishing any regional body are very clear and that all involved are well informed of the process and the issues with which they are faced.

⁷⁸⁶ Observation from interview process and personal experience.

⁷⁸⁷ Interview with subject XU11.

5.6 Lessons for Australia

Australian NRM models offer a number of lessons for how to advance sectoral arrangements (such as fisheries) in integrative processes (such as the RMP process). One of the recurring issues is whether to legislate for cross-jurisdictional and cross-sectoral coordination when implementing an integrated management process. While legislative arrangements appear to have worked well in delineating Commonwealth and state responsibilities in the GBRMP and the MDB, the 'policy' option was chosen over legislation in the development of *Australia's Oceans Policy* to avoid opening up potentially debilitating disputes with the states over jurisdiction and to avoid overturning effective OCS arrangements.⁷⁸⁸ Without legislation, however, it has been a long road to getting the states on board. Perhaps one lesson learnt from other Australian NRM models such as the South Australian Marine Planning Framework, is to ensure there is confidence and agreement within an organisation or collective body before presenting the collective proposal for external examination.

There are distinct advantages associated with zoning, including security, confidence and clarity in the process and, with effective consultation, zoning can also offer an effective form of conflict management. It is recognised, however, that zoning is only one of many potential management tools. Two different approaches to zoning have been adopted in the Great Barrier Reef and South Australia. South Australia started out with the approach of zoning by stakeholder groups to avoid conflicts, but soon discovered that conflicts were inevitable and that drawing 'lines on maps' to zone according to stakeholder desires, including the option of alienating the public from some of the more industry-intensive regions, was not an option. Therefore, South Australia changed the objective of their zoning arrangements to manage for conservation using multiple-use management principles. The GBRMPA also originally used spatial zoning to manage conflicts between users. And similar to South Australia, it has recently re-zoned the area to meet more stringent conservation objectives, while maintaining some of the traditional spatial separation of uses.

The Commonwealth chose against zoning in the SERMP because too little is known about the marine environment under Commonwealth jurisdiction and compliance and enforcement are too arduous offshore. While this may be true, it is also important to recognise that managing an area on a precautionary basis may buy time to address some of these data problems. For example, ER4 zoning in South Australia uses management on a precautionary basis with adaptive management principles to review zoning arrangements as more

⁷⁸⁸ Foster, E., Haward, M. and Coffen-Smout, S. "Australia's South East Regional Marine Plan (SERMP) Process and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) Initiative – Implementing integrated oceans management." *Marine Policy*, in press. (see Appendix One for signed permission forms).

information is discovered. Eventually, with the provision of more information, all the ER4 zones will be zoned as ER1-3 zones. Perhaps it is worthy to note the powerful influence of industries, such as the petroleum industry, that refuse to be locked out of areas due to unknown prospecting opportunities, coupled with the Howard Government's energy policy⁷⁸⁹ that has reformed fuel excises to offer incentives for frontier exploration and to seek self sufficiency in oil production, and how this could influence Australia's capacity to adopt an offshore zoning plan for conservation purposes.

The Queensland IPA offers some insights into a form of auditing process whereby development approvals must be checked off at different levels and by different agencies according to those impacted. This is a possibility for future development and uses under the RMP process, whereby an integrated oceans auditor could check proposals for conformity with the relevant RMP and then could disseminate the proposal for approval by other relevant departments and agencies.

The TRFA and the IPA process are examples of potentially effective consultation processes that have broken down in that the public do not get adequate opportunity to voice their concerns or that they have a chance to feed into the process, but there are no requirements for the management body to act on the issues raised. In areas of management where little is officially known about the resource, members of the public may offer the best insights from the perspective of unofficial first-hand experience to inform management practices. It is important therefore, that in progressing towards an integrated oceans management regime, where little is known about best practice, that the public are effectively engaged and that transparent feedback processes are incorporated such that management bodies are held clearly accountable to the public for their management decisions.

The TRFA is an example of nested subsidiarity, whereby individual organisations can manage their 'share' as they like as long as the overall objectives and criteria of the Commonwealth-State agreement are met. This type of arrangement could be the solution to getting states to actively participate in national integrated oceans management, where states have the freedom to manage state waters but they must be in accordance with some overarching national oceans objectives or strategies and there must not be conflicting management across the jurisdictional maritime boundary.

⁷⁸⁹ Prime Minister John Howard. (2004). "Securing Australia's Energy Future." White Paper on Australia's energy policy.

5.7 Summary

This chapter highlights some constructive approaches to integrated management that have been used in other Australian NRM models. It also emphasises the often ‘negative’ integration approach to natural resource management that has been adopted by Australian governments in the past. Approaches such as zoning for conservation are increasingly being highlighted as effective for the coordination of multiple-uses towards meeting common conservation objectives. This type of coordination generally involves overall coordination through a third party or third party instrument, or increasingly by a cross-jurisdictional decision-making body, that may prove most effective for at least coordinating sectoral management under the current Australian governance regime. Effective participatory processes are highlighted as an effective means for integration and preventative conflict management.

While this chapter deals with natural resource management in the Australian context, it is also of benefit to look to international counterparts for similar experiences in resource management from which Australia can learn and better inform its own processes. It is recognised that governance structures, budgetary allocations and general policy approaches will be vastly different, hence minimising the capacity for direct comparisons. However, specific aspects of the working relationships of international natural resource management models may be drawn from in implementing domestic policies and approaches. The following chapter looks at some international NRM models, drawing heavily from Canada, a similar federal state, and New Zealand, a unitary state with well developed resource management arrangements.

CHAPTER 6: INTERNATIONAL NATURAL RESOURCE MANAGEMENT MODELS⁷⁹⁰

Integration in natural resource management (NRM) is a concept currently being defined and implemented worldwide. The previous chapter examined selected approaches from within Australia to meet the requirements for integrated management. This chapter examines international examples of integrated management, examples reflecting global initiatives from the 1980s and early 1990s. While it is recognised that individual States have different governance systems and policy objectives that will guide specific approaches to natural resource management, examining detail of the operational arrangements that address cross-sectoral and cross-jurisdictional issues is clearly valuable. The analysis of these experiences can inform Australian processes, such as fisheries integration with the context of regional marine planning.

International NRM models are examined in this chapter for their capacity to address integration overall with respect to the Policy Integration Scale (PIS – see Section 1.2.1), for the more specific components of the model that effectively address cross-sectoral and cross-jurisdictional integration and for their capacity to address conflict management issues. Canada is an obvious starting point for comparative analysis due to its similar governance structure and the development of its national oceans management regime. Canada rivals Australia for leadership with respect to implementing integrated oceans management. Canada has, however, adopted a different approach of bottom-up implementation through ‘learning-by-doing’ approaches, with the result that national policy setting somewhat lagged behind operational ‘experiments’. This chapter also analyses New Zealand’s experience, which has a relatively long-history with integrated management in terms of its natural resources, providing a useful comparison with a different political system to that of Australia.

⁷⁹⁰ This chapter has been adapted from the following report, with the consent of the National Oceans Office (see Appendix One for signed permission forms):
Foster, E. (unpublished). “Evaluation of Alternative Models.” Consultancy report for the National Oceans Office, 2003.

6.1 Commissioner for the Environment and Sustainable Development (Canada)

The Commissioner for the Environment and Sustainable Development (CESD), part of the Auditor General's Office in Canada, is responsible for making the Government accountable for 'greening' its policies, operations and programs.⁷⁹¹ The CESD assists the Auditor General in auditing environmental and sustainable development issues.

6.1.1 Commissioner for the Environment and Sustainable Development

The Federal Commissioner for the Environment and Sustainable Development (CESD) was established under an amendment to the *Auditor General Act* in 1995, within the Office of the Auditor General (OAG).⁷⁹² The CESD has two roles:

1. to review how well Federal Government policies, programs and spending support Canada's move towards sustainable development; and
2. to provide liaison, monitoring and encouragement to the Government and the public on sustainable development.⁷⁹³

The 1995 amendments also imposed a requirement on 25 federal departments to prepare and deliver sustainable development strategies (SDS) and action plans to the House of Commons by December 1997, which are to be reviewed at least every three years.⁷⁹⁴ The 1995 amendments to the Act also introduced an environmental petitions process. The petitions process is a formal way for the public to ask Federal departments questions regarding environmental and sustainable development issues. Petitions are sent to the OAG and then the CESD, on behalf of the Auditor General, forwards them to the relevant Minister(s) who in turn must respond directly to the writer within 120 days.⁷⁹⁵

Following the 1995 amendments and in working with expert staff, the CESD is required to provide an annual 'green' report to the House of Commons on the extent to which Federal

⁷⁹¹ Commissioner of the Environment and Sustainable Development. (2001). http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/menu1_e.html [Access date: 20 May 2004].

⁷⁹² Office of the Auditor General. (2002). "What we do." http://www.oag-bvg.gc.ca/domino/other.nsf/html/body_e.html. [Access date: 15 December 2002].

⁷⁹³ Commissioner of the Environment and Sustainable Development (2001).

⁷⁹⁴ Commissioner of the Environment and Sustainable Development. (2001). "Department and Agency Strategies." http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/deptsd_e.html [Access date: 15 October 2003].

⁷⁹⁵ Commissioner of the Environment and Sustainable Development. (2001). "Environmental Petitions." http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/menu7_e.html [Access date: 20 October 2003].

departments have met the objectives and implemented the plans set out in the SDS.⁷⁹⁶

'Green' reports are additional annual reports to the OAG Annual Reports presented to the House of Commons, specifically addressing the issue of the environment and sustainable development. The CESD also comments on the number, nature and status of environmental petitions in these 'green' reports.

6.1.2 *How are integration and conflict dealt with in this NRM model?*

The CESD is a government-independent auditor who is charged with the responsibility of maintaining Federal Government accountability with respect to environmental and sustainable development issues. This is a 'negative' approach to integration, whereby departments are assessed for their cohesion with sustainable development (SD) principles and as such the CESD itself operates at around a Level 6 on the PIS (see Section 1.2.1). It is a form of reactive management whereby policies and programs are assessed for their capacities to address overall SD Government policy. Although the CESD does not encourage operational integration between departments, it does ensure that high-level consistency with overarching Government policy is maintained and that potential for conflicts between departments is minimised. Some of the operational aspects of this model are examined.

The CESD's mandate does not extend to examining or auditing provincial performance towards sustainable development. This poses a significant limitation for progress towards national sustainable development as most problems fall in the broad area of shared jurisdiction and as such, require provinces, municipalities, industry and all Canadians to act. The only mention of integration as part of sustainable development, which does not indicate any prescribed measures for cross-jurisdictional integration with provinces, is:

the integration of environmental and economic considerations, along with the consideration of equity, is a fundamental underpinning of the concept of sustainable development.⁷⁹⁷

The 1995 amendments to the *Auditor General Act* support the conclusion that the CESD provides scope for cross-sectoral integration. Specifically, section 21.1(a) states the need to integrate the environment with the economy. This point is emphasised in section 21.1(f) calling for *an integrated approach to planning and making decisions that takes into account the environmental and natural resource costs of different economic options and the*

⁷⁹⁶ *Auditor General Act 1995* - Appendix A. <http://www.oag-bvg.gc.ca/domino/reports.nsf/html/97aac.html> [Access date: 20 May 2004].

⁷⁹⁷ Office of the Auditor General of Canada. (2004). "What is Sustainable Development?" http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/menu6_e.html [Access date: 20 May 2004].

*economic costs of different environmental and natural resource options.*⁷⁹⁸ Additionally, in his 1999 report on the first round of SDS, the CESD highlighted the need for effective coordination across departmental mandates and warned departments that he expected to see them working together in areas of shared responsibility.⁷⁹⁹

The use of an environmental petitions process allows for a degree of conflict management whereby the government is made accountable to the public for its actions with respect to environmental and sustainability issues. Australia has a similar, yet less formal process whereby the public may question the actions or policy direction of any Minister and/or seek/provide information of relevance via written correspondence. The relevant Minister is politically-driven to reply in a timely and accurate manner. It would, however, be beneficial for Australia to adopt a formal environmental accountability process, such as having an ecologically sustainable development auditor as a matter of process. In doing this, it would ensure that ESD requirements are being met consistently across the land-coast-sea interface. In this system oceans governance and fisheries management would make up just part of the whole, and relevant departments would be accountable for their ESD actions in line with the overall Government objectives for ESD as outlined in Australia's *National Strategy for ESD*.

6.2 West Coast of Vancouver Island Aquatic Management Board (Canada)

The West Coast of Vancouver Island Aquatic Management (WCVIAM) Project established a community-based, cross-sectoral and cross-jurisdictional Board (herein referred to as 'the Board' or WCVIAMB). The Board was established for a pilot period of three years, from the Board's inauguration in February 2002. It was established with eight government and eight non-government representatives, with vested interests in aquatic management processes. The Terms of Reference for the Board were agreed by consensus in October 2000 and ratified by participating governments in February 2001.⁸⁰⁰

⁷⁹⁸ Auditor General Act 1995 - Appendix A.

⁷⁹⁹ Commissioner on the Environment and Sustainable Development. (1999). *Moving up the Learning Curve: The Second Generation of Sustainable Development Strategies*. Report of the Commissioner on the Environment and Sustainable Development. – point number 5.

⁸⁰⁰ West Coast of Vancouver Island Aquatic Management Board. (2002). <http://www.pac.dfo-mpo.gc.ca/oceans/im/amb.htm> [Access date: 20 August 2002].

6.2.1 *The Board composition*⁸⁰¹

The Board comprises 16 members. This includes the eight government representatives, two from each of the following levels and departments:

- two senior Federal Government representatives from Fisheries and Oceans Canada with decision-making responsibility in the management area;
- two senior provincial government representatives from the BC Ministry of Sustainable Resource Management with decision-making responsibility in the management area;
- two elected First Nations representatives from the Nuu-chah-nulth Tribal Council (emphasising the 'government-to-government' relationship that exists with First Nations); and
- two elected regional government representatives, one from each of the Alberni-Clayoquot and the Comox-Strathcona Regional Districts.

The remaining eight members comprise non-government members that characterise the diverse use and geography of the area, including commercial harvesting, aboriginal harvesting, recreational harvesting, processing, environment/stewardship, aquaculture, tourism and labour. These members are nominated by coastal communities, or those with an interest in integrated aquatic resource management, and are jointly appointed by an inter-government selection committee comprising representatives from all participating governments. Non-government members of the Board are not selected on the basis of representing any particular group or interest, rather they are selected on the basis of their commitment towards the Board's vision, purpose, principles and objectives, for their knowledge and experience in the area and their base of support.

6.2.2 *WCVIAMB Terms of Reference*⁸⁰²

The Board aims to focus governments, communities and stakeholders on principle-based, integrated ecosystem management. The Board's priority is that of conservation of aquatic resources and their habitats in the management area. It will achieve this by leading and facilitating the development and implementation of a strategy for the integrated management

⁸⁰¹ The following section drawn from:

West Coast of Vancouver Island Aquatic Management Board. (2003).
<http://www.westcoastaquatic.ca/Resources.htm> [Access date: 15 October 2003].

⁸⁰² The following section drawn from:

West Coast of Vancouver Island Aquatic Management Board. (2001). "Terms of Reference."
<http://www.westcoastaquatic.ca/PDF/WCVI%20AMB%20Terms%20of%20Reference.pdf> [Access date: 20 June 2004].

of aquatic ecosystems in the management area, based on a set of overarching principles and in a manner consistent with statutory authorities, policies, standards and processes (ToR:4).

The Board is predominantly an advisory body that makes consensus driven recommendations to the appropriate statutory authority, which is charged with the implementation of legislation and policies, in a shared decision-making process. Shared decision-making means that those with the authority to make a decision and those who will be affected by the decision will work together to seek an outcome acceptable to all involved. As a consensus-based body, members must agree on decisions that they can “live with” (ToR:17). In this model there is an inherent risk of compromising to the lowest common denominator on hard line decisions, which may result in broad outcomes that do not satisfactorily address the specificity of the issue at hand. For example, in trying to protect biodiversity, mediating between extreme views of complete area closures versus ongoing industry activity, it could be decided to close a small area where industry does not actually operate. This leads to the question of whether industries, such as fisheries, do not operate there because the area is actually not productive, in which case, would the closure really protect biodiversity? Despite this risk, it must be noted that the advice of the Board is only one method of input into the many processes that feed into decision-making affecting aquatic resource management in the area.

The Board has no mechanisms to override existing legislation, however, in certain circumstances the Board may be assigned responsibility to make decisions and implement changes. Despite the absence of any requirements for the statutory authority to act on the recommendations made by the Board, the all-inclusive sectoral and government framework of the Board is politically alluring for pro-active decision-making based on recommendations made.

6.2.3 *How the Board functions*

Issues are raised one of two ways and the Board’s time is divided roughly 50:50 between the two. The first way entails the issue response procedure. This involves a response to issues coming from the Board members, the public or interest groups, which require more immediate attention.⁸⁰³ The issue is addressed alongside a series of analytical questions agreed by the Board, including to what extent the issue is within the parameters of the Board’s decision-making capabilities.

⁸⁰³ West Coast of Vancouver Island Aquatic Management Board. (2002). “Operating Procedures.” <http://www.westcoastaquatic.ca/PDF/AMB%20Operational%20Procedures.pdf> [Access date: 20 June 2004].

The second stream of issues involves proactive strategic planning development. The focus of strategic planning is on the principles, objectives and evaluation framework outlined in the Terms of Reference. The Board has a strategic plan framework in place, which includes a shared vision of how aquatic management should look if the Board's principles and objectives were being implemented successfully. An assessment of work already being done in relation to WCVI aquatic management is then carried out and gaps and focus priorities are deciphered. Based on analysis of focus priorities, three- to five-year strategic goals are outlined for moving towards the principles or objectives of the Board's Terms of Reference. As part of these longer-term strategic goals, annual milestones are set and responsibilities assigned for achieving these goals. The Board must consult with other groups in achieving its strategic plan. Specific operational plans bring these strategic plans to fruition and the Board is generally less involved with these specific plans, but plays a strong role in monitoring whether goals have been met and milestones achieved.⁸⁰⁴

The Board may convene special shared decision-making forums called Management Committees (MC) to address particular issues, or perform particular tasks concerning the integrated management of aquatic resources in the management area (ToR:9). The MCs comprise experts and other people directly involved in, or affected by, management decisions. To the extent possible, members should be selected by prospective participants, be representative of the diversity of interests relevant to the committee's task, have a broad support base and share a commitment to work together. Like Board members, they should be committed to the Board's vision, principles and objectives in performing their tasks.

6.2.4 How are integration and conflict dealt with in this NRM model?

In theory, the overall integration capacity of this Board is very high. If implemented as intended, the Board would be around a Level 8 on the Policy Integration Scale (see Section 1.2.1), where a central intra-governmental body is establishing priorities and developing strategic plans for regional and cross-sectoral integrated management. In practice, however, the integration capacity of the Board is compromised by the practicalities of its implementation and advisory nature. This section explores some of the practical issues that have deviated the Board away from its potential for high level integration.

The government Board members carry equal weight and each is supposed to provide equal financial support. In conjunction with the consensus-based decision-making process inherent in the functioning of the Board, these features provide a theoretically well-established framework for cross-jurisdictional negotiations. In practice, however, there is

⁸⁰⁴ West Coast of Vancouver Island Aquatic Management Board (2002). "Operating Procedures..."

currently little cross-jurisdictional integration occurring. DFO supports the Board in addressing coastal zone management issues, but DFO does not see the Board as the appropriate arena to address anything 'too controversial'.⁸⁰⁵ This is reflected by DFO's decision to make the Board advisory, rather than granting it any decision-making authority, despite this being the Board's original aspiration. The Provincial Government has opted for observer status, meaning that it is not obliged to contribute financially and cannot be held accountable for the implementation of recommendations coming from the Board.⁸⁰⁶ In addition, the Nuuchah-nulth Tribal Council has retracted funding, resulting from having their own treaty funding being cut as they fight out a legal battle with DFO.⁸⁰⁷

Government representatives comprise senior level officials from all levels of government. The departmental representatives of each level of government, however, are not required to consult with other departments. Despite this, the political nature of the Board indicates that there is scope for cross-sectoral integration at the government level. Power to implement recommendations made by the Board remains with the vested statutory authority that assesses recommendations prior to consideration for implementation. Some statutory authorities will need to be convinced of the value of the Board's recommendations since they do not have the benefit of participating in its deliberations. This issue has been tabled by the Board and was included in the Minutes of the first meeting in February 2002 where it was suggested that a means be developed to get the *18 or so agencies involved in marine use...together and see how they want to be involved*.⁸⁰⁸ Also at the core of the Board's functioning is the basic principle of ecosystem-based management, which inherently implies integration of management practices across sectoral and jurisdictional boundaries.

Another mechanism for cross-sectoral integration available to the Board is the ability to convene special shared decision-making MCs to address particular issues or perform particular tasks concerning the integrated management of aquatic resources in the management area (ToR:9). By being representative and issue-specific, the Board is able to include a more diverse range of interests and a much wider knowledge base of the management area than if decisions were made independent of such Committees.

The Board may choose to participate in dispute resolution between resource users. When the conflicts between core government bodies of the Board itself cannot be resolved, however, it is questionable if the Board is ready for such a responsibility. Where the Board may offer

⁸⁰⁵ Pinkerton, E. (2003). WCVIAMB: Personal Communication – 11 September 2003.

⁸⁰⁶ Ibid.

⁸⁰⁷ Ibid.

⁸⁰⁸ West Coast of Vancouver Island Aquatic Management Board. (2002). "Board Meeting Draft Minutes: February 22/23, 2002." http://www.westcoastaquatic.ca/PDF/minutes_%20feb_02.pdf [Access date: 13 August 2003].

greater benefit is at the 'grass roots' level, whereby projects initiated under the Board's work program may bring historically disputant parties together to work towards a common goal. This has been illustrated in the development of the 2003-2005 Experimental Fishery Plan for Goose Barnacles, whereby the WCVI Aquatic Management Society worked in conjunction with local First Nations groups to determine the issues facing the fishery and the methods First Nations groups have used for thousands of years to sustainably harvest this species.⁸⁰⁹ These data sets were combined to develop an Experimental Fishery Plan designed to pave the way for the re-opening of commercial harvesting in a sustainable barnacle fishery on the WCVI.⁸¹⁰

6.3 Eastern Scotian Shelf Integrated Management Initiative (Canada)

The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative was announced on 3 December 1998 as the first pilot integrated oceans management plan under the auspices of Canada's *Oceans Act 1997*. It emanated from a recommendation in the 1997 *Sable Gully Conservation Strategy*, which stated that integrated management approaches should be applied to the offshore area around the Sable Gully Area of Interest under DFO's Marine Protected Areas Program.⁸¹¹ The objectives of this inter-governmental, multi-stakeholder initiative are to integrate the management of all activities in the ESSIM area, to encourage conservation and responsible use of marine resources, to maintain natural biological diversity and to foster economic diversification and wealth generation.⁸¹²

The Federal-Provincial ESSIM Working Group was formed in January 2001 in recognition of the need to formalise and integrate federal and provincial government policies and regulations in the ESSIM area.⁸¹³ The Working Group incorporates over 20 ocean-related federal and provincial departments, agencies and boards.⁸¹⁴ Due to a history of mistrust and

⁸⁰⁹ WCVIAMB. (2003). "WCVI Aquatic Management Board Meeting." Port Alberni, BC: 10-11 September 2003.

⁸¹⁰ Ibid.

⁸¹¹ Foster, E., Haward, M. and Coffen-Smout, S. "Implementing integrated oceans management: Australia's South East Regional Marine Plan (SERMP) Process and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." *Marine Policy*, in press. (see Appendix One for signed permission forms); and Rutherford, R.J., Herbert, G.J. and Coffen-Smout, S. "Integrated ocean management and the collaborative planning process: the Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." *Marine Policy*, in press.

⁸¹² Oceans and Coastal Management Division, Oceans and Environment Branch and Fisheries and Oceans Canada Maritimes Region. (2001). "Development of a Collaborative Management and Planning Process." A Discussion Paper prepared for the Federal-Provincial ESSIM Working Group. <http://www.mar.dfo-mpo.gc.ca/oceans/e/essim/essim-reports-planningprocess-e.html> [Access date: 13 August 2003].

⁸¹³ Foster, Haward and Coffen-Smout: *in press*.

⁸¹⁴ Rutherford, Herbert and Coffen-Smout: *in press*.

sectoral protectionism, most sectors maintain the desire for bilateral negotiations with DFO until such time as the government can prove they have developed adequate capacity to effectively meet multi-sectoral demands.⁸¹⁵

In February 2002, 150 participants attended the first ESSIM Forum Workshop held to initiate multi-stakeholder dialogue on integrated oceans management.⁸¹⁶ Emphasis was placed on the need for sectors to organise themselves so that their participation in the ESSIM process is effective and representative. The first ESSIM Forum Workshop discussions provided valuable input into the structure and function of the ESSIM Forum and the ESSIM Secretariat continues to use these considerations in refining the proposed Forum structure. As yet, the proposed model has not been fully implemented at the operational level.

6.3.1 *Institutional arrangements for the implementation of the ESSIM Plan*⁸¹⁷

The proposed ESSIM Forum consists of the following institutional arrangements to aid the development and effective implementation of the final ESSIM Plan:

- the *Oceans Management and Planning Group (OMPG)* – the core of the ESSIM Forum comprises non-government multi-stakeholder representation in an informative and advisory role on the development, implementation and operation of the ESSIM Plan, reporting to a proposed ESSIM Advisory Board. Decisions would be consensus-driven and meetings would occur quarterly⁸¹⁸;
- the *Federal-Provincial ESSIM Working Group* – mandated to implement government policy, program and regulatory harmonisation and coordination at the operational level whilst providing advice to the Regional Committee on Ocean Management (see below) on linkages, complementarities and conflicts between ESSIM initiatives and government policies, programs and regulations;

⁸¹⁵ Foster, Haward and Coffen-Smout: *in press*; and Rutherford, Herbert and Coffen-Smout: *in press*

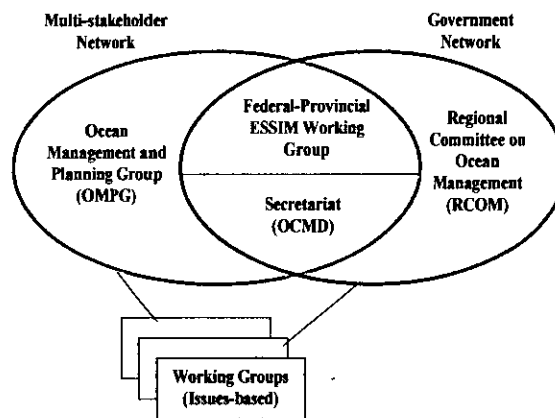
⁸¹⁶ Coffen-Smout, S., Herbert, G., Rutherford, R.J. and Smith, B.L. (eds). (2002). "Proceedings of the 1st Eastern Scotian Shelf Integrated Management (ESSIM) Forum Workshop." Halifax, NS: 20-21 February 2002. Canadian Manuscript Report of Fisheries and Aquatic Science 2604 (Halifax, DFO, 2002).

⁸¹⁷ This section is adapted from the following paper by the author, with the co-authors' permission (see Appendix One for signed permission forms): Foster, Haward and Coffen-Smout: *in press*.

⁸¹⁸ OCMD. (2001). "Development of a Collaborative Management and Planning Process: A Discussion Paper prepared for the Federal-Provincial ESSIM Working Group." November 2001.

- the *Regional Committee on Ocean Management (RCOM)* – comprises the senior executive forum for federal and provincial departments and agencies, including senior federal (Regional Director-General level) and provincial (Deputy Minister level) representatives and senior representatives of First Nations, to coordinate decision making at the intergovernmental and interdepartmental level on planning, management and regulatory matters in the ESSIM area in response to recommendations from the OMPG; and
- the *ESSIM Forum Secretariat* – currently the OCMD, facilitates and coordinates the planning and management process. It is charged with facilitating comprehensive communications and information exchange, compiling background reports and logistical support and coordination.

Figure 8 **Proposed ESSIM Forum to aid the development and effective implementation of the ESSIM Plan.**



6.3.2 The Eastern Scotian Shelf Ocean Management Plan

In preparation for the second ESSIM Forum workshop in February 2003, the ESSIM Secretariat released a discussion paper as a strategic planning framework for the development and implementation of the future Eastern Scotian Shelf Ocean Management Plan (ESSOMP or the Plan).⁸¹⁹ Since the first Workshop, the Initiative has evolved to include coastal areas through the establishment of the Large Ocean Management Area (LOMA) concept in DFO's national Policy and Operational Framework for Integrated Management (IM) of Estuarine, Coastal and Marine Environments in Canada, which was released with Canada's Oceans Strategy (COS) in July 2002.⁸²⁰

The ESSOMP will be a five-year strategic plan for the integrated management of all policies, programs, plans, measures and activities in or affecting the Eastern Scotian Shelf LOMA.

⁸¹⁹ ESSIM Forum Secretariat. (2003). "A Discussion Paper prepared for the ESSIM Forum." 3.

⁸²⁰ Oceans Canada. (2002). http://www.cos-soc.gc.ca/doc/publications_e.asp

The ESSOMP management vision is for:

An effective, collaborative process that provides integrated and adaptive management plans, strategies and actions for environmental, social, cultural, economic and institutional sustainability in the Eastern Scotian Shelf Large Ocean Management Area.⁸²¹

As currently envisioned, the ESSOMP will include the following key elements:

- a clear definition of the Large Ocean Management Area in geographical, physical and political/jurisdictional terms;
- a clear statement of purpose, scope and legislative basis for the Oceans Management Plan;
- a defined area of application with respect to the LOMA and sub-areas or ocean eco-zones;
- management vision and goals;
- management principles and approaches enshrined in the Plan;
- high-level management objectives in terms of the four elements of sustainability - (1) environmental – including ecosystem (implemented through the use of Marine Environmental Quality objectives) and sustainable-use objectives; (2) social and cultural; (3) economic; and (4) institutional;
- operational objectives that provide the basis for implementation of the Plan through annual action plans, which identify and prioritise planning requirements and implementation actions through the use of indicators, reference points, and accompanying management strategies and actions to maintain indicators within acceptable limits;
- area-based management framework of ecosystem-based sub-units;
- ocean use planning measures, such as zoning, to address spatial and temporal management requirements for multiple oceans use;
- institutional planning framework of collaborative processes for the development and implementation of the plan, including mechanisms for stakeholder engagement, planning and decision making, and addressing conflicts; and
- ongoing monitoring, performance measurement and feedback mechanisms to enable plan revisions and adaptive management.⁸²²

⁸²¹ ESSIM Forum Secretariat (2003) “A Discussion Paper...”: 17.

⁸²² Rutherford, Herbert and Coffen-Smout: *in press*.

6.3.3 *How are integration and conflict dealt with in this NRM model?*

It is difficult to assess how this model will address integration overall, in terms of the Policy Integration Scale, since the major driving instrument, the ESSOMP, has not yet been developed. However, there are significant developments with respect to the individual components of this model to address cross-sectoral and cross-jurisdictional integration, some of which are described below.

The development of the Eastern Scotian Shelf LOMA to incorporate coastal waters highlights the importance of municipal and provincial government participation in the ESSIM Forum if it is to be inclusive of all levels of government with decision-making authority in the management area. At the international level, the ESSOMP specifically addresses the issue of consistency with Canada's international commitments, responsibilities and rights and the need to collaborate with First Nations, including those bodies established under land claims agreements.

A concern with the development of the ESSOMP is that Fisheries and Oceans Canada (DFO) is the lead agency. DFO comprises the fisheries sector but has minimal influence over other sectors. Traditionally, management objectives and indicators have been based on the fishing industry. With DFO as the lead agency, the potential remains for the ESSOMP and ESSIM Forum to maintain their emphasis on the fishing industry. However, with the consensus-based structure of the executive decision-making level of government involved in the ESSIM Forum, the lead agency may prove having no more influence than as a coordinating body for the overall ecosystem-based development of the ESSOMP.

The Federal-Provincial ESSIM Working Group and RCOM offer scope for cross-sectoral integration through representation across the broad range of government departments with a management interest in the ESS area. The RCOM, as it is proposed, comprises Members and Associate Members, which constitute observers that may become full Members should the issue at hand directly impact their department. This provides an all-inclusive means for integration across departments at the senior level that also incorporates departments with only a few management responsibilities in the area.

At the core of the proposed ESSIM Forum is the OMPG, a multi-stakeholder body with an advisory role to the executive level of government. This body is open to all stakeholders with an interest in the management area and therefore has the potential to address the issue of cross-sectoral integration. Traditionally the fishing industry has dominated such forums, so the Secretariat has been charged with assisting stakeholder groups in making

representative and meaningful contributions to the ESSIM Forum by trying to build capacities to engage the diverse range of interest groups.

At this early stage of development, however, bilateral negotiations between DFO and the relevant stakeholder groups are maintained. This is due in part to scepticism over the degree of influence of this new multilateral process over existing management structures, while in other cases there is simply limited capacity in terms of people, resources or time to commit to the ESSIM Forum process. Stakeholders are reluctant to engage resources and time to a process that is still fundamentally in the early experimental stages of development. It is anticipated that with increased support and commitment from the governments, stakeholders will actively participate in the ESSIM planning and management process.

Conflict management through the Initiative has been discussed in terms of conflict resolution, crisis management and conflict avoidance mechanisms through planning and consensus-building. It has been acknowledged that in the first instance, the ESSOMP should be about providing a planning base with an associated vision and direction for the handling of identified issue areas to prevent conflict from occurring.⁸²³ If this is not successful or is too timely, then crisis management mechanisms such as ADR and other conflict resolution techniques may be required either in the interim, or to solve otherwise unresolvable issues.⁸²⁴ However, the emphasis is on proactive conflict prevention.

6.4 Quatsino Sound Coastal Management Plan (Canada)

The *Vancouver Island Strategic Land Use Plan* (2000) recommended that Quatsino Sound be given a high priority for coastal planning.⁸²⁵ In response to this recommendation, which was similarly identified as a priority by the Mount Waddington Regional District, and as a pilot Coastal Management Area (CMA) as part of DFO's greater Central Coast Integrated Management Initiative, the Quatsino Sound Coastal Management Plan was developed.⁸²⁶ The Plan area covers some 780km of shoreline and 1300km² of marine waters.⁸²⁷ Given that the Province has jurisdiction over the foreshore (intertidal areas of the coastline along the

⁸²³ Rutherford, B. (2003). "Discussion Item: Conflict Resolution." ESSIM Online Discussion Forum – 11 March 2003. <http://www.thinkwell.ca> [Access date: 23 September 2003]; and Massicotte, A. (2003). "Discussion Item: Conflict Resolution." ESSIM Online Discussion Forum – 12 March 2003. <http://www.thinkwell.ca> [Access date: 23 September 2003].

⁸²⁴ Herbert, G. (2003). "Discussion Item: Conflict Resolution." ESSIM Online Discussion Forum – 30 March 2003. <http://www.thinkwell.ca> [Access date: 23 September 2003].

⁸²⁵ Ocean Management Research Network. (2003). "Integrated Coastal Planning in British Columbia: Lessons Learned." Workshop Backgrounders for the 2003 OMRN National Conference. 5 November 2003. <http://www.maritimeawards.ca/OMRN/pacific-print.html> [Access date: 22 May 2004].

⁸²⁶ Ministry of Sustainable Resource Management (BC). (2004). "Quatsino Sound Coastal Plan." BC: Coast and Marine Planning Branch. 30 March 2004.

⁸²⁷ Ibid.

coastal 'inland waters' and many agreed upon sub-tidal areas) and the Federal Government has jurisdiction over the seabed from the low water mark (from the boundaries of the inland waters, seaward to the territorial limit) it is imperative that all levels of government cooperate to develop and implement this integrated Plan.⁸²⁸ The Plan is designed to assist prospective land tenure applicants, First Nations, local government, Land and Water British Columbia Incorporated (LWBC) and other agencies in dealing with applications for the use of provincial Crown foreshore and nearshore tenures.⁸²⁹ While the Plan identifies uses for which applications of tenure may be submitted for a given area, the Plan does not guarantee that once accepted, the tenure applications will, or should be approved.

6.4.1 Planning Units

The Plan area is divided into 15 smaller planning units so that a more precise examination of uses and interactions in the area may be assessed. In the Plan, each planning unit includes:

- a description (including a biophysical Ecounit Profile⁸³⁰, areas of ecological significance, special features, unit attributes based on government GIS databases and assigned Relative Importance values);
- a map of the specific area;
- values that are specific to the Quatsino First Nation;
- current uses and activities in the planning unit area;
- issues and concerns raised in consultation with the public and stakeholders;
- coastal management goals – addressing the requirements of the federal Integrated Coastal Management program;
- a table of acceptable tenured uses in the planning unit area⁸³¹;
- the management emphasis of the planning unit (Conservation, Recreation, Community or General Management Emphasis – see Section 6.4.3)⁸³²;
- the conditions for acceptance of tenure application;
- tenure approval and management guidelines; and
- required action for follow-up and implementation.⁸³³

⁸²⁸ Ministry of Sustainable Resource Management (BC) (2004) "Quatsino Sound Coastal Plan"

⁸²⁹ Ibid.

⁸³⁰ Derived from the BC Marine Ecounit Classification.

⁸³¹ See section 6.4.2 below for determining acceptability.

⁸³² See section 6.4.3 below for an explanation of management emphasis categories.

⁸³³ Ministry of Sustainable Resource Management (BC) (2004) "Quatsino Sound Coastal Plan"

6.4.2 *Determining acceptable uses*

The Plan only provides recommendations with respect to uses that are subject to provisions of the provincial *Land Act* requiring that they be tenured.⁸³⁴ The Plan identifies 18 such uses in the Quatsino area including, but not limited to: aquaculture operations; docks, wharves and associated facilities; log handling; boat launches; marine telecommunications and utilities; and conservation.⁸³⁵ Other activities are acknowledged in the Plan to ensure that the full range of undertakings is considered in the making of decisions, but recommendations relating to their ongoing nature are not made. The determination of acceptable uses is based on a series of decision rules that consider existing use commitments, compatibility, agency siting and best management practices.⁸³⁶ Each use is assigned a code of acceptability. These are one of the following:

- *acceptable* – the use is considered acceptable and appropriate – applications should be accepted for processing and evaluation, bearing in mind that this does not guarantee that a tenure will be approved;
- *conditionally acceptable* – the use is considered conditionally acceptable – new applications should be accepted for processing and evaluation only if they meet the terms of relevant Management Provisions in the Plan; or
- *not acceptable* – the use is considered inappropriate – applications should not be accepted for processing and evaluation.

There is a formal variation process for any applicant wishing to challenge a conditionally acceptable or not acceptable determination based on it being a new technology or method, a new economic activity or venture, or reflecting a change in local community support.⁸³⁷ These challenges are dealt with on a case-by-case basis and do not guarantee a permanent change if granted acceptability in this instance, but may pave the way for future reform in the annual review of the overall Plan.

6.4.3 *Categorising planning units in terms of management emphasis*

Planning units are classified in one of four management emphasis categories. These are:

- *Conservation Emphasis* – accounting for approximately 15% of the Plan area, consists of units predominated by or adjacent to significant marine ecological or cultural features and values, including terrestrial and marine protected areas and other reserves;

⁸³⁴ Ministry of Sustainable Resource Management (BC) (2004) “Quatsino Sound Coastal Plan”

⁸³⁵ Ibid.

⁸³⁶ Ibid.

⁸³⁷ Ibid.

- *Recreation Emphasis* – accounting for nearly 15% of the Plan area, consists of units predominated by public and commercial recreational activities, significant features and opportunities;
- *Community Emphasis* – accounting for less than 3% of the Plan area, consists of units predominated by a concentration of multiple uses and activities that are associated with adjacent floating or upland settlement, typically including any combination of commercial, industrial, community and public institutional uses, private moorage and/or rural development; and
- *General Marine Emphasis* – accounting for around 67% of the Plan area, consists of units characterised by relatively remote locations with limited uses and/or development potential and generally lower biological diversity, with ongoing marine transportation and navigation activities and commercial and recreational fishing activities.⁸³⁸

Although planning units are classified in these management emphasis categories, it is not intended that these categories represent zoning, but rather these categories are intended to represent the general flavour of the current range of uses and activities and a general sense of the preferred future opportunities for any given area. Any use could feasibly occur in any planning unit regardless of the management emphasis.

6.4.4 How are integration and conflict dealt with in this NRM model?

The Quatsino Sound Central Management Plan provides for the coordination of uses in the Plan area through provincial planning tenure applications as required under the Provincial *Land Act*. The Plan provides for *coordination* rather than *integration* towards sustainable development and conservation in the area, as individual uses are not required to be managed in accordance with other uses, rather they are collectively managed for their overall impact on a given area. The Plan therefore has a low level capacity (Level 1) for integration on the Policy Integration Scale. Non-tenure activities are also identified and taken into account with respect to management decisions, but recommendations are not made on these and as such they are limited only by regulations outside the jurisdiction of this Plan. As identified below, the Plan does, however, provide for specific integration capacities with respect to cross-jurisdictional issues and some limited capacity for cross-sectoral integration.

Cross-jurisdictional integration is incorporated in the Plan through coastal management goal-setting in each planning unit, reflecting the relevant elements of the federal Integrated Coastal Management program. The Plan is provincially-led but also satisfies the

⁸³⁸ Ministry of Sustainable Resource Management (BC) (2004) "Quatsino Sound Coastal Plan"

requirements to be the first pilot CMA under the federal Central Coast Integrated Management Initiative. Alongside the extensive consultation between departments and governments, using a provincially-led plan to meet the requirements of a federal-based initiative is a clear indication of advanced cross-jurisdictional integration and trust between governments.

The extensive range of uses tested for acceptability illustrates the cross-sectoral capacity of this Plan. Through incorporation and recognition of industry, community, First Nations and conservation as valid uses in the area, the Plan inherently aims to balance economic, conservation, social and cultural objectives for the Quatsino Sound. This cross-sectoral capacity, however, is limited by the fact that the Plan only assesses tenure uses for acceptability and not for actual approvals. Non-tenure uses, whilst recognised in the Plan, lay outside the auspices of this Plan, hence compromises the cross-sectoral capacity to control overall impact in the area. The Plan is also limited in that it provides a template for uses that could be allowed in the area but offers no guidance or indication on approvals of tenures, hence it may lead to a concentration of effort by particular users in the future if not adequately monitored.

The formal variation process offers one opportunity for conflict management whereby new opportunities, technologies and shifts in community perceptions can be incorporated into the Plan's provisions. However, being assessed on a case-by-case basis, this has the potential to create more conflicts if one such variation is accepted but a similar application is rejected. It is thus important that in the Plan's annual reviews, these variations are noted and incorporated accordingly and assessed with consistency.

6.5 *Resource Management Act 1991 (New Zealand)*

The *Resource Management Act 1991* (RMA) came into force on 1 October 1991 after four years of negotiations.⁸³⁹ The RMA replaced over 20 major statutes and more than 50 other ad hoc environment-related laws.⁸⁴⁰ The purpose of the RMA is:

to promote the sustainable management of natural and physical resources.⁸⁴¹

As such, it is the first piece of legislation to integrate the management of New Zealand's land, water, air and other resources to meet specific environmental outcomes and depends

⁸³⁹ Ministry for the Environment. (1999). "Your Guide to the Resource Management Act: An essential reference for people affected by or interested in the Act." Wellington, NZ: Ministry for the Environment.

⁸⁴⁰ Ibid.

⁸⁴¹ *Resource Management Act 1991* (as amended) [NZ], s.5(1).

largely on the goodwill of local government to do the 'right thing' at the 'right time'. The RMA is characterised as enabling, rather than prescriptive, legislation. As such, despite the devolution of resource management to the local authorities, it says little about what mechanisms must be used in the course of that management.

In its strictest sense, the RMA does not cater for social, economic or cultural issues except in the context of their effects on the environment. However, there is continuing debate over the interpretation of the purpose.⁸⁴² Some argue for the 'environmental bottom-line' approach whereby the biophysical environment cannot be traded or compromised in decision-making. Others argue for the 'overall judgement' approach whereby consideration of the social, economic and cultural issues must be made.⁸⁴³

6.5.1 Central Government - roles and responsibilities

Under the RMA, the Governor-General is able to prepare national environmental standards that have the force of legislation and which local authorities must have regard to in the development of all policy statements and plans.⁸⁴⁴ National environmental standards are also given effect through the granting of resource consents. No national standards have actually been set to date, although some are currently being developed.

Although the RMA is based on the principle of subsidiarity - meaning that decisions are taken as close to the community of interest as possible - the Minister for the Environment retains the ability to exercise specific decision-making powers. The Minister has the power to develop national policy statements to guide local authorities on matters of national significance. As part of this process, the Minister must release the proposed statement for public comment and appoint a Board of Inquiry to investigate and report on the proposal.⁸⁴⁵ Once approved, local authorities must ensure their plans give effect to any national policy statement or any New Zealand coastal policy statement.⁸⁴⁶

⁸⁴² Government of New Zealand. (2002). "Oceans Policy Stocktake Report – Appendix 1: Analysis of Legislation." <http://www.oceans.govt.nz> [Access date: 19 December 2002].

⁸⁴³ Upton, S., Atkins, H. and Willis, G. (2002). "Section 5 re-visited: a critique of Skelton & Memon's analysis." *Simon Upton-on-line website*. <http://www.arcadia.co.nz/rm/section5.htm> [Access date: 12 June 2004].

⁸⁴⁴ *Resource Management Act 1991* (as amended) [NZ], s.43(1).

⁸⁴⁵ *Resource Management Act 1991* (as amended) [NZ], s.46 & 47.

⁸⁴⁶ *Resource Management Act 1991* (as amended), s. 67(2a).

6.5.2 *Regional Councils - roles and responsibilities*

There are 12 regional councils in New Zealand, which govern spatial areas defined by major terrestrial water catchment boundaries.⁸⁴⁷ They are responsible for managing the use of land, air and water resources and for coordinating the management of these resources at the regional scale. They are vested with the authority to control pollution (that is, discharges of contaminants to land/air/water, water quality/quantity) and are responsible for controlling water abstraction (including geothermal energy), soil conservation, coastal management and natural hazard mitigation.⁸⁴⁸

Regional councils must prepare regional policy statements that establish the resource management issues in the region, state the environmental goals and means to achieve them and outline policies for integrated resource management.⁸⁴⁹ Regional policy statements must not be inconsistent with any water conservation order and must give effect to any national policy statement or New Zealand coastal policy statement.⁸⁵⁰ These policy statements provide the directional framework from which regional and district plans are prepared.

Regional councils may also prepare regional plans to provide the detail necessary to fulfil the policy requirements. These regional plans are not (with the exception of coastal plans) compulsory, but must be prepared if a council wishes to exercise regulatory control. Regional plans are: binding on all resource users; identify significant management issues; and set out appropriate objectives, policies and methods to address these issues. They also specify the information required for resource consent applications and outline the possible environmental results that may occur with implementation of the plans.⁸⁵¹ All plans must give effect to any national policy statement or New Zealand coastal policy statement and must not be inconsistent with water conservation orders or regional policy statements.⁸⁵²

6.5.3 *District/City Councils - roles and responsibilities*

There are 69 district, or city councils, referred to as territorial/local authorities in New Zealand, that are responsible for land use and surface river/lake planning, subdivision and noise pollution.⁸⁵³ Territorial authorities must prepare district plans that identify significant resource management issues in the district and set out the objectives, policies and methods to

⁸⁴⁷ Ministry for the Environment (1999) "Your Guide to the Resource Management Act...": 18.

⁸⁴⁸ *Resource Management Act 1991* (as amended) [NZ], s.30.

⁸⁴⁹ *Resource Management Act 1991* (as amended) [NZ], s.62.

⁸⁵⁰ *Resource Management Act 1991* (as amended) [NZ], s.62(3).

⁸⁵¹ *Resource Management Act 1991* (as amended) [NZ], s.67(1).

⁸⁵² *Resource Management Act 1991* (as amended) [NZ], s.67(2).

⁸⁵³ Ministry for the Environment (1999) "Your Guide to the Resource Management Act...": 18.

address these issues.⁸⁵⁴ However, before adopting any provision, the local authority must demonstrate that it is necessary and the most effective and efficient means relative to other means. Thus, although local authorities must have plans, the content of those plans is not prescribed.

Similar to regional plans, district plans must specify the information required for resource consent applications and outline the environmental results that may occur with implementation of the plan. District plans must give effect to national policy statements and New Zealand coastal policy statements and must not be inconsistent with water conservation orders, regional policy statements and regional plans.⁸⁵⁵ Provisions of district plans may include rules controlling land use (including rules requiring activities to obtain resource consent), designations, or a notice to the community of an intention to use land for a particular purpose, and heritage orders to protect heritage characteristics of particular places.

6.5.4 Public participation – rights of appeal & the Environment Court

The Act gives local authorities much discretion about whether to and how to do things. It also emphasises consultation and provides significant opportunities for public participation, through public submission processes, and rights of appeal. All persons have had at least two (and often many more) opportunities to make submissions on plans before they are adopted. However, an amendment was made in 2003 to include provisions to cut back on public notification for the specific case of resource consent applications with only minor environmental effects.⁸⁵⁶ For those applicants that have been unable to obtain approval from all affected parties, but where environmental effects are only minor, then the new amendments allow the council to notify only those deemed to be affected, rather than the prolonged delays and financial costs associated with full public notification.⁸⁵⁷ This may be seen to compromise the transparency of such processes on the one hand, but on the other hand will minimise delays and costs of relatively ‘safe’ consents so that focus can remain on the more complex approvals processes.

All persons who make submissions have a right to appeal to the specialist Environment Court should they be dissatisfied with the local authority’s decision.⁸⁵⁸ In addition, any person who has an interest greater than the public generally, whether or not they were a submitter, has the right to appear at a Court hearing. Depending on the significance of the

⁸⁵⁴ *Resource Management Act 1991* (as amended) [NZ], s.75(1).

⁸⁵⁵ *Resource Management Act 1991* (as amended) [NZ], s.75(2).

⁸⁵⁶ Ministry for the Environment. (2004). “Amendments to the Resource Management Act.” <http://www.mfe.govt.nz/laws/rma/amendments.html> [Access date: 12 July 2004].

⁸⁵⁷ *Ibid.*

⁸⁵⁸ *Resource Management Act 1991* (as amended) [NZ], s.120.

potential effects, similar rights of participation can be available with respect to resource consents. The broad rights of participation extend to allowing any person to seek enforcement action against any resource user acting contrary to the Act, or even against a local authority for not adequately fulfilling its functions.

The Environment Court is a critical part of the regime. The Court, consisting of a Judge and two specialist/technical commissioners, issues enforcement notices and hears appeals on both resource consents and plans.⁸⁵⁹ Lodging an appeal is a relatively straightforward and inexpensive procedure. In considering appeals, the Environment Court hears the matter afresh and may overrule, amend or uphold the local authority's decision as it sees fit.

6.5.5 Resource consents

Resource consents are effectively *permission to use or develop a natural or physical resource and/or carry out an activity that affects the environment*.⁸⁶⁰ The RMA includes five types of applications for consent of activity. These are for:

1. land use consent;
2. subdivision consent;
3. water permits;
4. permits for discharges to water, land or air; and
5. coastal permits for any use of a coastal resource.⁸⁶¹

The vast majority of resource consents are obtained from regional or district and city councils. However, there are two exceptions:

- resource consents may be *called in* and determined by the Minister for the Environment (although, to date, this has only occurred once)⁸⁶²; and
- particular activities identified in the New Zealand Coastal Policy Statement as *Restricted Coastal Activities* are ultimately determined by the Minister of Conservation (see below)⁸⁶³.

Each application for resource consent must be accompanied by a comprehensive environmental impact assessment as part of the application to determine the effects of the activity on the environment.⁸⁶⁴ The emphasis is on management of the environmental effects

⁸⁵⁹ Ministry for the Environment (1999) "Your Guide to the Resource Management Act...": 20.

⁸⁶⁰ Ibid: 26.

⁸⁶¹ *Resource Management Act 1991* (as amended) [NZ], s.87.

⁸⁶² *Resource Management Act 1991* (as amended) [NZ], s.140.

⁸⁶³ *Resource Management Act 1991* (as amended) [NZ], s.117(1).

⁸⁶⁴ *Resource Management Act 1991* (as amended) [NZ], s.88(2b).

rather than on the activity itself. Land use, subdivision and coastal consents for reclamation have an infinite lifespan, unless stated otherwise.⁸⁶⁵ All other consents may be obtained for a maximum 35-year period and if no time is specified, consent applies for a five-year period.⁸⁶⁶ Review times may be specified in the consent terms but review outside these agreed periods is restricted to particular circumstances (principally the adoption of a new regional plan).

6.5.6 Coastal areas

Coastal areas are dealt with as something of a special case under the RMA. The Minister of Conservation (the Minister) is assigned the task of preparing a New Zealand Coastal Policy Statement (NZCPS) taking into account the physical, biological, social and economic considerations of coastal management (the first was adopted on 5 May 1994).⁸⁶⁷ Under the umbrella of the NZCPS, regional councils prepare their policy statements specific to the needs of the region. At a more issues-based level, regional councils must prepare regional coastal plans that cover their regions from the mean high water spring tide to the limit of the territorial sea.⁸⁶⁸ These plans must be approved by the Minister. The allocations, water and discharge aspects of activities in the coastal marine area, including aquaculture activities, are managed through coastal plans and the coastal permit process. Local district authorities are then assigned the task of developing district plans to manage land-use activities of the coastal area.⁸⁶⁹ Regional councils approve coastal permits except in the case of *restricted coastal activities* (RCAs), which are activities identified as having potentially significant environmental effects. Although regional councils are involved in considering RCA applications, the Minister for Conservation makes the final decision.

There are two contentious issues confronting New Zealand coastal management under the provisions of the RMA. These are the aquaculture moratorium, leading up to the aquaculture reform package, and the foreshore and seabed debate. Aquaculture has had a complex and somewhat confusing history with management coming under one of two Acts – the *Marine Farming Act 1971* or the RMA – and permits and licensing issued under two different Acts – the RMA (coastal permit) and the *Fisheries Act 1983*.⁸⁷⁰ In March 2002, the *Resource Management (Aquaculture Moratorium) Amendment Act 2002* was passed imposing a two-

⁸⁶⁵ *Resource Management Act 1991* (as amended) [NZ], s.123(a & b).

⁸⁶⁶ *Resource Management Act 1991* (as amended) [NZ], s.123(c).

⁸⁶⁷ Ministry for the Environment. (2002). <http://www.mfe.govt.nz/management/act.htm> ; and Rosier, J. and Hastie, W. (1996). "New-Zealand coastal planning: an issue-based approach." *Ocean & Coastal Management*, 33 (1-3): 147-165.

⁸⁶⁸ Rosier and Hastie (1996).

⁸⁶⁹ Ibid.

⁸⁷⁰ Gibbs, N. (2002). "The Aquaculture Moratorium – blunt instruments vs. targeted tools." *Resource Management Journal*, March 2002, X (I): 12-14.

year moratorium on the granting of RMA coastal permits for aquaculture activities.⁸⁷¹ The moratorium allows councils to plan for aquaculture development in line with the *Resource Management (Aquaculture Reform) Bill*, expected to be introduced into Parliament in late 2004.⁸⁷² The imposed moratorium, however, has been the cause of conflicts between government and the marine farming industry. Industry believing that the moratorium severely limits their development capacity to meet the rising demands of the international market, and government wanting to take the time to ensure adequate legislation is in place to minimise conflicts between resource users and to ensure a sustainable and viable industry.⁸⁷³ The joint aquaculture reform, between the Ministry of Fisheries and the Department of Conservation, is intended to provide the framework for sustainable marine farming in New Zealand by rolling the regulation of environmental impacts of aquaculture into the RMA, rather than being split between the two different Acts as is currently the case.⁸⁷⁴

The foreshore and seabed debate has stemmed from a decision of the Court of Appeal in June 2003, which indicated that the Maori Land Court had jurisdiction to consider claims of customary rights of the foreshore and seabed.⁸⁷⁵ If the Maori Land Court found evidence for customary title, it was alluded to that a new freehold title could be created for that land. This decision attracted adverse media coverage focusing on the public outcry of those who were concerned for their freedom of access rights to these foreshore and seabed areas. In response to these concerns, the New Zealand Government has tabled a *Foreshore and Seabed Bill* in Parliament, which reinforces the public right of access to the foreshore and seabed through vesting full ownership of the area with the Crown in perpetuity.⁸⁷⁶ The Bill also proposes clear recognition of customary rights through increased opportunity for participation in decision-making processes and protection of recognised customary activities under the provisions of the RMA. Despite this recognition, however, it is clear that the Government will not consider any proposal for private tenure of the foreshore and seabed area.

6.5.7 How are integration and conflict dealt with in this NRM model?

The 'nested' arrangement of the RMA defined by the principle of subsidiarity, establishes cross-jurisdictional policy coordination that, as necessary, carries through from the central government down to the district or city councils. It is explicitly stated that regional policy statements must give effect to national policy statements, regional plans must give effect to

⁸⁷¹ Ministry for the Environment. (2004). "Aquaculture reform."
<http://www.mfe.govt.nz/issues/resource/aquaculture/> [Access date: 12 June 2004].

⁸⁷² Ibid.

⁸⁷³ Gibbs (2002).

⁸⁷⁴ Ministry for the Environment (2004) "Aquaculture reform"

⁸⁷⁵ Ministry for the Environment. (2003). "The Foreshore and Seabed of New Zealand: Protecting Public Access and Customary Rights." Summary of Government's Proposals. August 2003.

⁸⁷⁶ NZ Government. (2004). "Foreshore and Seabed Bill." Government Bill. 22 April 2004.

national policy statements and not be inconsistent with regional policy statements and district plans must give effect to national policy statements and must not be inconsistent with any of the regional instruments. This mechanism seeks a relatively loose form of policy coordination, around a Level 4 on the Policy Integration Scale (see Section 1.2.1), with the RMA ostensibly enabling considerable variation in policy approaches through the use of the flexible but 'negative' approach of the *not inconsistent* test.

Furthermore, policy integration is arguably limited in that the RMA promotes a largely one-way coordination framework with each level of government obliged to coordinate with the next level *up* the hierarchical chain of governance. The extent to which the RMA promotes policy and management integration *between* governments is difficult to assess. Local authorities must consult with relevant Minister(s) and other local authorities affected by plans and policies. Although local authorities have a high degree of discretion over the extent to which views of others are accommodated, any of these aggrieved parties is able to refer any dispute to the Environment Court to be settled if necessary.

Cross-jurisdictional integration is promoted through the RMA that provides for: local authorities to prepare combined plans with other local authorities; regional councils to prepare plans that address a number of resources in an integrated way; the ability to transfer functions; and to hear development proposals jointly where more than one management agency is involved. The seamless jurisdiction from land extending over coastal water is limited only by the fact that it ends at the territorial sea boundary (12nm), outside which *ad hoc* regimes exist. Due to the dynamic nature of the oceans, this can be problematic when trying to effectively manage environmental outcomes. While a number of mechanisms *enable* integration, none ensure it. There is seemingly a tension within the RMA between a desire to promote integration and a desire for a devolved system to allow for local 'special case' solutions to local issues. Much depends on the individual management decisions of local authorities, as is consistent with the RMA's promotion of an essentially devolved management system.

The purpose of the RMA establishes the Act as a non-sectoral management regime that focuses on *environmental effects* rather than activities, uses, or sectors. It provides for a full range of uses by not distinguishing between them, relying instead on the assessment of effects to determine what is accommodated and what is not. The pursuit of social, economic or cultural outcomes is not within the scope of the purpose. However, balance is achieved by ensuring these conditions are a relevant consideration. Limitations on social and economic welfare must be justified on robust environmental grounds.

Cross-sectoral integration, although effectively redundant in the values-based approach of the RMA, is compromised due to the incomprehensive nature of the document with reference to the resources that it covers.

For instance:

- fisheries management is not addressed in the RMA, even though the impacts on aquatic biodiversity are;
- there is an untidy interface with indigenous forestry, whereby two separate and un-integrated regimes apply to the management of indigenous forests. One of these regimes is the RMA that is intended to address the impacts on indigenous biodiversity and the other is for the “protection of areas of significant indigenous vegetation” as a national priority; and
- aquaculture also has an untidy regime whereby pre-1991 farms are currently managed under a separate *Marine Farming Act*, and post-1991 farms are managed under the RMA. However, in both circumstances licenses issued under the *Fisheries Act* and RMA coastal permits are required. This complex regime is currently being addressed in the Aquaculture Review and is expected to be resolved with the passing of the *Resource Management (Aquaculture Reform) Bill* in late 2004.⁸⁷⁷

The RMA, however, does not set out to ensure a particular balance of uses is achieved. That is left to the individual decisions of sectors and users. Conflict between competing users on plan and resource consents is resolved in public decision-making forums. Critical to the feasibility of the approach is the open and participatory decision-making processes. Recent amendments to limit opportunity for participation should not impact the transparency of the process too greatly, as these amendments only apply to very specific scenarios and all directly impacted should effectively be consulted. Generally, planning processes provide multiple opportunities for public participation and there is open access to appeal to the specialist Environment Court.

6.6 Lessons for Australia

Regional marine planning in Australia is only one of many terrestrial and marine initiatives working towards ecologically sustainable development as envisioned in the *National Strategy for ESD*. In Canada, the wide ranging array of SD initiatives has been recognised and rather than attempting to manage them as one integrative unit, they are assessing each program’s capability to meet the overall national objectives for SD. This ‘bottom-up’

⁸⁷⁷ Ministry for the Environment (2004) “Aquaculture reform”.

approach ensures that individual components of the management system have adequate capacity to meet the overall objectives of sustainable development through integrated management. To this end, it is important that RMPs incorporate a performance assessment system that ascertains whether the RMP is meeting the overall national objectives of AOP and ESD, as well as the specific objectives of the RMP itself. This will also require a more systemic approach whereby capacity within each contributing sector to address integration, as encapsulated by regional marine planning, will need to be built and effectively implemented.

Effective government and stakeholder engagement and consultation is a recurring issue in NRM models internationally, as well nationally. Token gestures of support by provincial government is evident in the WCVIAMB and thus compromises the Board's capacity to deal with issues in an integrative way. Likewise the state consultative groups involved in the development of the SERMP might also be accused of tokenism. The development process for *Australia's Oceans Policy* was praised for its effective engagement and consultation with relevant stakeholders and the general public. The development process for the SERMP, however, has likewise been criticised for selective consultation with specific representatives of the community and peak stakeholder groups. While these representatives have been selected or choose to participate on the basis of their expertise and representativeness, some feel that a more open and transparent process should have carried through to the regional marine planning stage. Canada's ESSIM Initiative provides for this continuing engagement through annual ESSIM Forum Workshops. In this way, stakeholders and the wider community not involved in the day-to-day developments of the Plan are assured of a regular opportunity to contribute to the planning process, get updates and provide feedback.

Most NRM models involve some form of planning. Australia's SERMP lacked any formal planning process in the beginning and this arguably contributed to the tardiness of its development and limited capacity to address planning issues *per se*. The Quatsino Sound Plan is based on a tenure system under the auspices of the provincial *Land Use* legislation. Currently, Australia has no legislation for the integrated planning and management of its offshore jurisdiction. The tenure system incorporated in the Quatsino Sound Plan offers some potential insights into possible tenure arrangements for Australian activities offshore, which would embrace the current sectoral governance arrangements but also plan for the cumulative impacts of activities in the region.

New Zealand's RMA is a working example of how the nesting of planning arrangements can work to ensure that the will of central government is followed for the national benefit, without the need for central government to apply strict controls. Australia has the capacity

to adopt such an approach to integrated oceans management and is attempting to do so through the MACC's IOM Working Group. However, the constitutional division of power between states and the Commonwealth potentially limits Australia's capacity to adopt a nested approach. Australia has no binding overarching direction or objectives for integrated oceans management, therefore there are no guarantees that the Commonwealth's or states' efforts towards effective integrated oceans management will be reflected or complemented across all marine jurisdictions.

6.6 Summary

This chapter illustrates some of the similarities in natural resource management between Australia, Canada and New Zealand, which all maintain a relatively sectoral approach to management whilst attempting to incorporate effective principles of integrated management. The principle of 'subsidiarity' is used by all these countries and is illustrative of the 'negative' approach to integration that has worked well in the sectoral-based, hierarchical governance systems. Canada is slowly moving towards a more 'positive' approach to integration, which encourages practical participative management and effective communication. It will be important for Australia to adopt some of these more proactive approaches to integration in the regional marine planning process, including incentives to build capacity for integration from within sectoral arrangements.

The following chapter draws from the information in this chapter, and all previous chapters, to propose some tools and approaches for oceans and fisheries management that will enhance the capacity of Australian fisheries to meet the integration objectives of integrated oceans management. These tools and approaches build on current management practices in Australia, some reflected in other natural resource management areas, and on international experience to provide a well informed inventory of tools that effectively address the implementation issues of integration and conflict management, as identified in the Chapter One.

PART IV:

RESULTS AND CONCLUSIONS

CHAPTER 7: THE TOOLBOX

The thesis aimed to address critical issues in the implementation of fisheries management in regional marine planning under *Australia's Oceans Policy*. Preceding chapters have identified implementation issues and examined a number of initiatives, both Australian and international, in natural resource management. This enables the identification of tools and approaches that can address the primary concerns of integration and conflict management in the implementation of fisheries management under the framework of regional marine planning in Australia.

This chapter examines a number of alternative tools and approaches – in effect a ‘toolbox’ – to address integration and conflict management in fisheries and oceans management. The ‘toolbox’ draws from the information gathered in this study and is separated into instrumental⁸⁷⁸ and institutional⁸⁷⁹ tools for implementation in recognition of the fact that these are two separate, but highly dependent processes required for the successful implementation of an integrated approach to resource management. This dichotomy, while to a degree an artificial construct, reinforces the key point that instrumental tools, such as national policies, will not necessarily bring about change without the appropriate institutional, or structural, arrangements in place to operationalise them. Likewise, institutional tools, such as participative forums, will not promote integration or change if there is no guiding instrument or clear will for change to coordinate activities.

7.1 Approaches for integration and conflict management

While more specific solutions have been proposed in this chapter to address specific fisheries and oceans issues, there are some overarching tools that can be used in Australia to aid policy integration and support improved conflict management.

⁸⁷⁸ *Instrumental tools* refer to policies, principles, legislation, etc that are used to guide actions towards integrated fisheries and oceans management.

⁸⁷⁹ *Institutional tools* are the governance structures set in place to support integrated management and implementation of instrumental tools.

7.1.1 *A Marine Policy and Legislative Clearing House*

A coordination tool used internationally and mentioned in the development of AOP and regional marine planning has been the establishment of a marine policy and legislative “clearing house”. The Department of the Prime Minister and Cabinet (DPM&C) would be ideally suited to this role, as it has an oversight of all government activity and a policy coordination objective. This includes policy coordination with the states/territories, which would ideally suit the cross-jurisdictional and cross-sectoral integration objectives of oceans management. A clearing house would not give rise to integration as such, but it does offer opportunity for the effective coordination of activities in the marine environment across departmental mandates. Feedback and reporting mechanisms could be used to identify areas of overlap or inconsistencies in government policy or objectives in the marine sector and actioned responses could reflect these accordingly.

Departments and agencies would be required to register any marine-based policy or legislative initiatives, including regulations, with the Clearing House stating objectives and management mechanisms. The Clearing House would have the capacity to advise the relevant department or agency whether there was any overlap with other management arrangements and which other agencies were involved, to reduce the potential for conflict upon implementation. It would also ensure that PM&C are well positioned for negotiations and coordination with the states/territories on issues to do with integrated oceans management. Coordination, rather than integration, through registration with the Clearing House is perhaps a more practical first step for integrating activities that, to date, have been managed within distinct sectoral arrangements.

The Clearing House’s role centres on ‘preventative conflict management’ through the early identification of potential conflicting objectives. Departments or agencies may be made aware of these conflicts by PM&C and be given the prerogative to decide on appropriate actions, whether they trigger conflict management mechanisms, or if the department or agency feels the probability of the conflict escalating to these triggers is unlikely, to simply note the potential and deal with it when and if it arises. The Clearing House could also offer an avenue for ‘reactive conflict management’, such as mediation or conciliation, should departments or agencies not be able to satisfactorily manage a conflict. The Clearing House, positioned in PM&C, would have access to the broad view of national objectives, hence would be well suited to balance objectives and resolve conflicts for national benefit. This avenue for conflict management should, however, only be used as a last resort due to the personnel demands it would engender if used as the first option.

7.1.2 *An Ecologically Sustainable Development Auditor*

An ESD Auditor could be established in Australia to assess various sectors for meeting the objectives of the *National Strategy for ESD*. This institutional arrangement could be modelled on the Canadian Commissioner of the Environment and Sustainable Development and established under the auspices of Australia's *National Strategy for ESD*, the *Environment Protection and Biodiversity Conservation Act 1999* or the *Auditor-General Act 1997*.⁸⁸⁰ An ESD Auditor would be responsible for increasing government accountability over its actions with respect to ESD. This role is arguably already embraced by annual reporting mechanisms and performance assessments under the EPBC Act. These provisions are, however, tentative and weak and do not adequately address differences in reporting structures or establish a standard means to assess ESD.⁸⁸¹ A specific ESD Auditor, situated in the Australian National Audit Office, would provide for independent scrutiny to ensure that ESD was being pursued consistently across the Government. At present the Auditor-General has the mandate to undertake performance audits, inclusive of environmental audits, at his discretion.⁸⁸² However, as illustrated by experience in Canada, the establishment of a well resourced audit institution with a mandate to specifically address ESD issues would be significantly more successful at infusing all components of ESD into future policy direction. While this would not explicitly help Australia meet integration objectives, it would ensure that marine industries are being managed for ESD, and therefore intuitively managing for ecosystem health that would contribute to integrated management. The obvious limitation to the effectiveness of an ESD Auditor is the absence of power to audit state/territory sectors, or to assess whether they were meeting the same ESD objectives, hence cross-jurisdictional cohesion would be limited.

7.1.3 *Mediation training*

One of the re-emerging issues in any area of management is the ability of the convenor, or chair of meetings, to effectively manage conflicts between parties in order to keep them engaged and to reach agreeable solutions to issues. Keeping all parties 'at the table' and working together to reach an agreeable outcome is often half the battle in natural resource management.⁸⁸³ It often falls to the convenor, or chair, to play this role while stepping back from the actual debate. This is a difficult role for chairs who are also departmental or agency

⁸⁸⁰ Rose, G. (2001). "Environmental Performance Auditing of Government – the role for and Australian Commissioner for the Environment." *Environmental Planning and Law Journal*, 18 (3): 293-318.

⁸⁸¹ Ibid.

⁸⁸² *Auditor-General Act 1997* (Cwth), s. 8.

⁸⁸³ From interview with subject GJ62.

representatives as, quite often, these constitute some of the key players in the debate.⁸⁸⁴

While conflict management and more specifically, mediation, comes naturally to some managers or convenors, it is important that others are trained in the meeting processes that will help achieve effective and lasting results. This is especially important in government where officials are acting in the interests of the public good and as such should be able to separate 'needs' from 'desires' to achieve effective and balanced outcomes without reaching ineffective lowest common denominator decisions. Standard mediation and meeting process training for any management position or in the least, access to training, should be provided for all public service employees.⁸⁸⁵

The other option is to rely on independent trained mediators recommended by organisations such as the National Alternative Dispute Resolution Advisory Council (NADRAC). The NADRAC was established in 1995 and funded by the Australian Government Attorney-General's Department to advise the Government and Federal courts and tribunals on ADR issues.⁸⁸⁶ The cost of hiring a trained mediator or training internal mediators, at first glance, seems quite excessive. However, when looking at the number of issues that could have reached a timely and satisfactory resolution if coordinated by a trained mediator from the start, the cost becomes somewhat obsolete. Training would also prepare meeting participants so that they themselves would recognise distinctive behaviours and the importance of distinguishing 'needs' and 'desires' to reach agreeable resolutions. Mediation training, however, does not guarantee a good convenor or chair. Much of their success falls to an intuitive response to personal characters and an ability to control people, a gift not everyone can readily access.

7.2 Integrated oceans management tools

The integrated oceans management initiative is technically outside the scope of this study, due to the jurisdictional limitations of the SERMP. It has been included because, without complementary state arrangements or at least agreement to cooperate, the SERMP will be ineffectual. The influence of urban run-off, intense coastal activity and other land-based pollution cannot be ignored in such a dynamic and interconnected environment as the oceans, where impacts will be felt through time and space, knowing no jurisdictional

⁸⁸⁴ Middle, G. (2004). "Institutional arrangements, incentives and governance – unlocking the barriers to successful coastal policy making." Queensland: Cooperative Research Centre for Coastal Zone Estuary & Waterway Management (Coastal CRC). A report from the Coast to Coast 2002 Conference, Tweed Heads. Published April 2004: 8.

⁸⁸⁵ A recommendation also reflected in coastal management – see Middle (2004): 10.

⁸⁸⁶ National Alternative Dispute Resolution Advisory Council (NADRAC). (2004). "ABOUT NADRAC: What is NADRAC?" Canberra: Attorney-General's Department. <http://www.law.gov.au/www/disputeresolutionHome.nsf/HeadingPagesDisplay/About+NADRAC?OpenDocument> [Access date: 31 May 2004].

boundaries. For this reason, and in recognition of the evolution of integrated oceans management, this section provides some tools for the effective implementation of integrated oceans management.

Are current integrated oceans management/ oceans policy arrangements addressing the issue of integration (cross- jurisdictional / cross-sectoral)?

At present, the IOMWG of the NRMMC is working on a nationally agreed set of principles of good governance to assist cooperation and consistency in oceans management across jurisdictional boundaries.⁸⁸⁷ This national approach will advance Australia towards greater cross-jurisdictional cohesion with respect to the objectives of the ESD of our oceans. Is agreement of “principles of good governance” enough? Will this be another half-hearted attempt at addressing key issues? Should we be working towards a stronger commitment towards integrated oceans management from all jurisdictions? Some alternative proposals that address these issues are outlined in this section.

Cross-sectoral integration is addressed clearly in AOP and consequently in the SERMP. The development of MPAs, fisheries spatial management, a national system to address the problem of introduced marine pests, cumulative impact multiple-use risk assessment, estuarine and coastal water quality monitoring and a system of indicators to measure marine ecosystem health, all contribute to the cross-sectoral management of the oceans to ensure the conservation and protection of marine ecosystems.⁸⁸⁸ Despite these significant steps towards ecosystem-based management, individual sectoral management is maintained and may prove an impediment to cross-sectoral integration beyond basic coordination. A number of alternative cross-sectoral approaches are identified in this section.

Do current integrated oceans management/AOP arrangements include effective conflict management provisions?

Integrated oceans management has to incorporate conflicts associated with past but relevant policy developments, such as that associated with the Commonwealth passing of AOP. Participative processes are recognised as tools to heed such conflict and induce momentum towards satisfactory resolution. These are some of the approaches being used by the IOMWG. Preventative conflict management mechanisms include comprehensive policy development, planning and coordination, networking, information dissemination and public

⁸⁸⁷ National Oceans Office. (2004). “South-east Regional Marine Plan – Implementing Australia’s Oceans Policy in the South-east Marine Region.” Hobart: National Oceans Office: 18.

⁸⁸⁸ Ibid: 32.

consultation.⁸⁸⁹ These have all been incorporated into the development of the SERMP under AOP to varying degrees. The development of the SERMP has included comprehensive planning and coordination mechanisms as well as extensive information dissemination avenues and several commendable opportunities for public consultation in the process. However, as pressure increased for the timely release of the Plan, public consultation was reduced and tensions mounted as stakeholders felt locked out of the process once again. This had the potential to reignite old conflicts and work against the NOO in gaining public trust and acceptance of the final Plan. It is important that once opened, consultation channels are maintained and stakeholders remain engaged. This section identifies some avenues for effective stakeholder consultation processes in an effort to minimise the potential for future conflicts.

7.2.1 *A National Integrated Oceans Management Policy*

The IOMWG of the NRMCC's MACC, has the potential to readdress cross-jurisdictional conflicts that arose in the development of AOP. Originally intended as a *national* oceans policy, AOP had the potential to create a nationally agreed approach to the management and use of Australia's oceans. That chance was overrode for political reasons, but has since been re-captured through the work plan of the IOMWG. The IOMWG is working towards integrated approaches to sustainable ocean use that crosses jurisdictional boundaries.

Although 'principles of good governance' are being developed for the management of the oceans, these guiding principles may not take a strong stance towards supporting the ongoing integrated ESD of the oceans. It is therefore possible that a national approach, such as a *National Integrated Oceans Management Policy*, could be developed with associated indicators and performance measures to determine if the objectives of the policy are being met over time. This policy could not comprise blanket regulations, but rather would need to be broad enough to encapsulate jurisdictional differences in ocean management approaches whilst maintaining an integrated approach towards the conservation of the oceans. This approach would be endorsed by the COAG before implementation, and therefore would have a strong cross-jurisdictional foundation. One of the primary breakdowns in the national approach to AOP was the lack of clarity with respect to financial incentives for states to sign on to such a policy. Any new policy would need to adopt federal funding incentives for state sign on and ongoing joint funding arrangements for monitoring national performance. This would give the states security in that they could retain their associated management

⁸⁸⁹ Commission of Inquiry into the Conservation, Management and Use of Fraser Island and the Great Sandy Region and The Cabinet Office of New South Wales. (1990). "Public Issue Dispute Resolution – A Joint Discussion Paper."; and From interview with subject XU11.

arrangements, but also be eligible for federal funding assistance under the federal-led integrated oceans management program. Funding would be provided for states to accordingly adjust their arrangements in line with a national policy and its associated objectives.

7.2.2 Conservation Zoning

Although zoning has not been promoted in the development of AOP and in regional marine planning to date due to a lack of stakeholder support, it should not be discounted as a viable option for future RMPs. Stakeholders are implicitly supporting some form of zoning in the development of RMPs to ensure security of access for the future. This perhaps reflects the lack of understanding of multiple-use management by stakeholders in the early stages of regional marine planning, where the NOO was itself showing signs of uncertainty over the best way forward for integrated oceans management. Effective marketing and confident delivery of options, with an indication of potential and probable impacts to industries from the onset would have arguably curtailed this blanket rejection of zoning. The other major impediments to explicit zoning involve accommodating interests of key industries, such as petroleum, minerals and biotechnology, over concerns that zoning would lock these industrial uses from areas when neither the resource potential nor the impacts of exploration in given areas is sufficiently known.

*Conservation Zoning*⁸⁹⁰ is an approach not dissimilar to the South Australian ecologically rated (ER) zones, incorporated in their marine planning process. In effect this falls in line with multiple-use planning and management being pilot tested in the Otways region of the south-east. *Conservation Zoning* would require that the region, in this case the South-east Region, be divided into subunits potentially based on bioregions. Each bioregion would then be assessed in terms of importance in the overall function of the regional ecosystem and assigned a conservation category with an associated maximum number of allowable impact units. The current and potential uses of the bioregion would then be ascertained and through multiple-use risk assessment processes, each activity/use and combination of activities/uses would be assigned an impact unit according to the impact or cumulative impact the activity(s)/use(s) has on the ecosystem health. Subjectivity would be unavoidable in assigning impact units, but the adoption of a rigorous, replicable and transparent risk assessment process would prevent this from becoming an issue. The bioregion would then be managed according to the allowable impact for the area, with no one sector allowed to dominate more than 30% of the collective regional area, unless specifically authorised due to

⁸⁹⁰ An approach developed by the author in early work at DAFF in February 2002 as a possible way forward for the SERMP to incorporate effective integration and conflict management principles.

a lack of competition from other uses. Once the maximum number of allowable impact units is reached, no more activities or uses would be allowed in the bioregion until impact units are reduced to, or are below, the maximum allowable impact units. By disallowing *any* use or activity from occurring once the total allowable impact units are reached, all industries or sectors in the zone should feel the ramifications equally and will potentially work together to find a timely solution to a reduction in impact units.

Guidelines for conflict management in determining the reduction of impact units would need to be pre-determined and a timeframe for the trigger of an alternative conflict management mechanism should the stakeholders fail to reach an agreeable solution in a timely fashion, should also be pre-determined. Similar to multiple-use management, this would require conservation, economic and social and cultural objectives to be set for each zone. A pre-determined process to balance the allowed uses to meet these objectives, would also be determined on a case-by-case basis. These processes should be pre-determined to ensure security for industry and confidence in the process. Another advantage of this approach would be that in some conservation zones, uses or activities exceeding a pre-determined number of impact units may be disallowed as too impact intensive for that given area. This would be based on the assumption that there are known overall impacts, and therefore effects associated with particular values of impact units. Obviously the maximum number of allowable impact units would need to be regularly reviewed and monitored in terms of regional ecosystem health requiring ecosystem indicators, triggers and management mechanisms for quick response to be incorporated in the overall SERMP. As experienced in the MPA process, the issue of compensation or structural adjustment is bound to arise and need to be addressed prior to implementation.

7.2.3 *An Integrated Oceans Management Act*

One option to further strengthen the concept of conservation zoning, would be the development of an *Integrated Oceans Management Act*. There are a number of options for such legislation. As a support for the concept of *Conservation Zoning*, this legislation could be a planning act providing for the tenure of activities and uses in the offshore marine region delivered through regional marine planning. Refining this legislation to allow applications for resource use to be referred to an assessment board based on bioregions, would ensure that maximum allowable impact units are not exceeded and that the overall objectives of conservation of ecosystem health in the region are achieved. This type of framework to administer use is not dissimilar to the Clearing House concept. It would not explicitly encourage integration, but would involve the coordination of activities to meet set objectives.

This legislation could in theory be modelled on the complementary Commonwealth and state approach that underpinned the Offshore Constitutional Settlement. Since regional marine planning currently remains under the auspices of AOP, the process only relates to Commonwealth legislation, applicable to planning and management in Commonwealth waters only, therefore negating any cross-jurisdictional integration potential. The nature of ecosystem-based management and integrated oceans management infers that any legislation should be applicable across jurisdictional boundaries. Despite this seemingly obvious practicality, our federal system makes it extremely unlikely that all states and territories as well as the Commonwealth will agree to come under the same planning legislation, especially given the fiscal and management issues that would arise.

A national approach to legislation for integrated oceans management would need to respect the independent management regimes of states, territories and the Commonwealth, yet lay the ground rules for effective integration based on the land-coast-ocean continuum. This could be accomplished through the setting of overall objectives for the region, crossing the land-coast-ocean interface and putting these in legislation as well as any national monitoring and reporting requirements to determine the success of integrated oceans management in meeting these objectives nationally. This could also simply be accomplished through establishing legislative state-Commonwealth coordinating bodies to ensure management across the jurisdictional boundary is complementary. It would require states to work with the Commonwealth in devising state coast and marine plans, and likewise the Commonwealth to work with the states in developing RMPs. This is arguably occurring in the Commonwealth's AOP process through the SE States Consultative Working Group, however, it is more a one-way informative consultation between the Commonwealth and states rather than a two-way participative consultation. There is no legislative requirement to complement or integrate with either regime nor work towards a common objective for the land-coast-ocean interface.

7.2.4 The future for Marine Protected Areas

The NRSMPA has the potential to address the issue of integration as raised in the RMP process through area or seasonal management with respect to user conflicts, the potential to counteract some of the detrimental effects of resource exploitation and as a reference point for future scientific assessments. Effective implementation, however, depends on stakeholder support while maintaining scientific credibility and achieving conservation objectives. An important lesson that has emerged from the current MPA process is the need to slow down and take the appropriate time to work through the issues of conflict between stakeholders. This may require a disassociation from the regional marine planning process and associated deadlines. In doing so all parties may reach consensus, hence ending up with

80% of what they want, rather than the lowest common denominator that may result from a rushed effort. Consensus-based decisions would also promote a greater sense of ownership of the process that can assist with enforcement down the track.⁸⁹¹ However, political pressure to deliver tangible outcomes in the SERMP dictates that this time will not be taken.⁸⁹² This is relevant for the MPA process, but also for any such planning process that involves multiple stakeholders. The MPA process depends on credible science but, given the gaps in knowledge and time required to adequately address these gaps, cannot be based on credible science if rushed through.

There is also a need for clarity with respect to the MPA process; how it involves stakeholders and what is required of them.⁸⁹³ The use of BAOI has created unnecessary uncertainty for stakeholders with interests in the BAOI and should not be used in future plans, but rather the Region should be a blank map from which work with stakeholders and scientists identifies appropriate MPA areas. The fact that the fishing industry are satisfied with MPA processes as running in Tasmania for example, indicates that industry *will* come on board to MPAs if given clear guidelines with respect to the process of identification and selection and the opportunity to have their say and be actively heard.⁸⁹⁴ The Commonwealth needs to perhaps learn from their counterparts and slow down to ensure that the objectives for establishing MPAs are met and that everyone is on board. If not, enforcement issues are certain to become problematic in the future.

There are options that could ease the anxieties of the fishing industry over the designation of MPAs. One option would be to assign MPA selection to an independent body (such as the Resource Planning and Development Commission in Tasmania) answerable to the NOMB with some form of an appeals tribunal in place so that fishers and other stakeholders may present their case.

Another possible avenue for the effective implementation of MPAs, free of political influence, would be a combined private/public sector designation process. The private sector would be responsible for the identification of candidate sites and would be answerable to the public and relevant stakeholders, taking into account all the biological, social, economic and cultural issues. Government could provide the legislative and policy backing for the effective implementation and ongoing management of the designated areas. The carefully appointed private sector has no particular vested interest in the identification of candidate MPAs and is proposed as a good alternative to public sector MPAs that are understandably

⁸⁹¹ From interview with subject GJ62.

⁸⁹² From interview with subject FM66.

⁸⁹³ Ibid.

⁸⁹⁴ From interview with subject MD21.

influenced by the 'politics of the day'.⁸⁹⁵ The problem with solely private sector MPAs is that they often lack the capacity to address the issues of effective monitoring and compliance and adequate funding resources that go along with these responsibilities. The question is also raised of whether MPAs, which dictate the management of public resources, can be governed by the private sector in as much as fishers do not 'own' the fish, rather the 'right' to fish. Hence a combined effort could potentially free MPA designation from political whims and industry influence. A business management approach by the private sector to MPA designation based on credible science and conservation objectives, not inconsistent with government policy and legislation, could be effectively implemented and monitored by the government.

7.3 Fisheries management tools

Are current fisheries management/policy arrangements meeting the objectives of integration (cross-jurisdictional /cross-sectoral /intra-sectoral)?

Cross-jurisdictional integration of fisheries management is inadvertently achieved through bilateral negotiations under OCS agreed arrangements. This is only inadvertent integration because the OCS is based on principles for delivering species-based management rather than jurisdictional management, usually by entrusting the management of the species or population over its entire range to one or the other jurisdiction. The OCS arrangements work well when there are no on-water intra-sectoral interactions, but there needs to be work done on how the Commonwealth and States can have joint authority in practice.⁸⁹⁶ Other problems that have arisen with the OCS relate to multi-species, multi-gear fisheries and complementary management arrangements across jurisdictional lines.⁸⁹⁷ Some approaches to combat these issues are proposed in this section.

Cross-sectoral integration issues are dealt with under the guise of multiple-use management projects directed by the NOO. Whilst this approach has met with some opposition as industries want to continue to address these issues themselves, it does present a new opportunity for effective conflict management mechanisms to be established. The advantages of some of these approaches have been highlighted in this section.

Intra-sectoral integration is an issue pushed to the forefront of fisheries policy making since the inception of the SERMP and the IOM initiative. In recognition of the increasing

⁸⁹⁵ Hinkley, L. and Reckseik, H. (2003). "MPA Perspective: Managing conflict with and among user groups: winning strategies for MPA managers." *MPA News*, 4 (10): 6; and Middle (2004): 6.

⁸⁹⁶ From interview with subject NT49.

⁸⁹⁷ From interview with subject LX67.

influence of the relatively uncontrolled recreational fishing sector and demand for recognition of the indigenous fishing sector, the Commonwealth Government has developed a resource sharing framework, which is in the process of being tested. Whilst this provides positive opportunity for intra-sectoral management, the complexities involved impede expedient implementation. Some current arrangements and alternative proposals are presented in this section for their capacity to address intra-sectoral integration.

Do current fisheries management/policy arrangements include effective conflict management provisions?

Current fisheries management arrangements do not explicitly address the management of conflicts, with most significant conflicts being addressed in arbitration. Stakeholder participation and inclusion in decision-making processes is recognised as an effective means to prevent significant conflicts from occurring. The following sections present alternative proposals that address the issue of conflict management within the context of current fisheries management processes.

7.3.1 Regional OCS arrangements

At present, fisheries OCS arrangements are deliberated on a case-by-case basis between relevant jurisdictions as issues arise. It would be beneficial to have a proactive regionally-based OCS arrangement to complement traditional reactive bilateral arrangements, whereby a strategic approach towards issues, such as recreational fishing and multiple-species management, can be dealt with cohesively across jurisdictional boundaries within a given region. Such a proactive OCS arrangement could be actioned through the Southern Fisheries Management Forum (SFMF: see Section 7.4.7) to complement IOM initiatives also actioned through the NRMCC. Regional OCS arrangements could also include conflict management mechanisms and triggers for known interactions to expedite resolution time for anticipated conflicts.

7.3.2 Fisheries management plans

Many potential areas of conflict in fisheries were recognised in the 1980s and 1990s. One source of conflict centred on the key question of who actually had the right to manage or control the fishery? Centralised government control was questioned due to its lack of success in the past and pressure rose for a move towards co-management practices and industry involvement.⁸⁹⁸ In light of an ever-limiting resource, internal fishery conflicts

⁸⁹⁸ Charles, A.T. (1992). "Fishery conflicts. A unified framework." *Marine Policy*, 16 (5): 379-393.

between different gear users and different user groups were arising over resource use.⁸⁹⁹

Management plans were being challenged and input-based management practices, such as limited gear or limited entry, were being replaced by output-based management, such as total allowable catches (TACs).⁹⁰⁰ The move away from input-based management approaches was designed to reduce effort that was otherwise uncontrollable.

Output-based management is not suited to all fisheries. It is best used in single species fisheries with few fishers, hence few landing points to monitor. It is also a good management tool for fisheries producing minimal or no by-catch and targeting species in which abundance does not fluctuate unpredictably.⁹⁰¹ Output-based management in fisheries that involve by-catch species can often lead to discarding and high grading, which is the discarding of the low-value part of the catch. Fisheries such as prawn trawl fisheries are unsuitable for output-based management, as the prawn abundance is unpredictable and highly variable from year to year.⁹⁰² Fishers have a great capacity to outmanoeuvre bureaucratic control and overfish their given quotas or to escape the limitations of input controls, but are increasingly improving their understanding of, hence their capacity to meet, ecosystem-based fisheries management objectives.

ITQs were used as a management tool as early as 1984 in the Southern Bluefin Tuna fishery in Australia, but did not feature in other fisheries until the early 1990s.⁹⁰³ ITQs essentially give quasi-property rights to fishers, hence they increase stability within the fishing industry and reduce overall effort of catch. However, there are apparent problems with ITQs, some of which are eminent in Australian fisheries today. Amongst these are the problems associated with initial allocation – who to allocate quota to and how much – and the problems of compliance and enforcement.⁹⁰⁴ A suggested allocation mechanism within the commercial fishing sector, and potentially between commercial and recreational sectors, is to allocate quota preferentially to graded gear types, the higher grading being equivalent to higher environmental protection and more cost-effective production.⁹⁰⁵ Quota would be

⁸⁹⁹ Charles (1992).

⁹⁰⁰ Haward, M. (1995). "The Commonwealth in Australian Fisheries Management: 1955-1995." *The Australian Journal of Natural Resources Law and Policy*, 2 (2): 313-325; and Kearney, R.E., Andrew, N.L. and West, R.J. (1996). "Some issues in the management of Australia's marine and coastal fisheries resources." *Ocean & Coastal Management*, 33 (1-3): 133-146.

⁹⁰¹ Kearney, Andrew and West (1996).

⁹⁰² Ibid.

⁹⁰³ Campbell, D., Brown, D. and Battaglene, T. (2000). "Individual transferable catch quotas: Australian experience in the southern bluefin tuna fishery." *Marine Policy*, 24: 109-117.

⁹⁰⁴ Sutinen, J.G. (1999). "What works well and why: evidence from fishery-management experience in OECD countries." *ICES Journal of Marine Science*, 56: 1051-1058.

⁹⁰⁵ Kearney, Andrew and West (1996).

transferable but only to higher or equivalent gear grading, therefore limiting the quota to the more environmentally desirable and cost-effective modes of fishing.

7.3.2.1 *An overarching management plan*

The SESSF (see Section 3.2.1.4) is significant in its approach to regional management crossing traditional intra-sectoral barriers in an attempt to meet the objectives of ecosystem-based fisheries management. However, it is increasingly apparent that commercial fishers are not solely to blame for the demise of certain fisheries worldwide. Other contributing factors are habitat degradation (from human interference or natural phenomenon), pollution and other fishery users, such as recreational and indigenous fishers.⁹⁰⁶ There are well established controls and checks on the commercial catch in Australia, but the recreational catch is managed *ad hoc*, with no overarching national policy or management guidelines for control between jurisdictions. It is speculated that recreational fishing actually exceeds some commercial catch statistics, yet has traditionally been unofficially managed.⁹⁰⁷ Thus what has eventuated is a haphazard form of governance of recreational catch, with some states imposing recreational licenses with strict bag and other gear limits or seasonal closures, whereas in other states, recreational fishers are relatively free from constraint. Likewise, the indigenous cultural take is not well recorded and to date is relatively unmanaged due to ongoing native title claims and the difficulty in monitoring and enforcing any such constraints on cultural take.⁹⁰⁸

As fishery management issues emerge, or are publicised, it is evident that the lack of knowledge about the impact and size of the recreational and indigenous fishing sectors is impeding successful management practices. These issues have increasingly caused conflict with other users of the marine environment, especially commercial fishers who are under increasingly strict control and cost-recovery management, which they view as impacting their livelihood whilst other users of the resource are able to “freely” fish, sometimes even competing for the same resource. While the SESSF deals effectively with the regional integration of the commercial sector, there lies also the potential to incorporate other users in the management plan as well.

In New Zealand, the TAC is set incorporating commercial and non-commercial take and then a commercial TAC (TACC) is allocated.⁹⁰⁹ The TACC is set bearing in mind the non-commercial take, even though the recreational sector is not explicitly allocated quota. The

⁹⁰⁶ Kearney, Andrew and West (1996).

⁹⁰⁷ Ibid.

⁹⁰⁸ From interview with ZA91.

⁹⁰⁹ Batstone, C.J. and Sharp, B.M.H. (1999). “New Zealand’s quota management system.” *Marine Policy*, 23 (2): 177-190.

Maori people are then allocated 20% of the TACC in accordance with the *Treaty of Waitangi (Fishery Claims) Settlement Act 1992*.⁹¹⁰ In Australia, resource sharing between fisheries user groups was a concept introduced in the *Commonwealth Fisheries Policy Review*. Despite the establishment of a RSMWG to deal with the complex issue of multi-sectoral fishing allocations and to provide advice to the Minister for Fisheries, Forestry and Conservation (the Minister), this group has focused on the practical implementation of the Framework in one fishery and only in relation to recreational and commercial sharing. Since meeting in November 2003, the group has still not come to any resolution on the implementation of the Framework.

A different approach would be for the development of an overarching management plan for each fishery, setting a global TAC (inclusive of commercial, recreational, indigenous⁹¹¹ and aquaculture catch⁹¹² where appropriate), the ecosystem-based management issues pertinent to the fishery and the process for intra-sectoral allocation and dispute resolution. The global TAC would be based on the best available scientific knowledge of the ecologically sustainable yield, taking into account the maximum yield that can be taken from a species population or stock without affecting ecosystem functioning. This work would require the use of integrated models and decision rules due to the lack of adequate data in most scenarios. Once the maximum ecologically sustainable yield, or global TAC, was set then it would be up to a central allocation body, perhaps even the AFMA in conjunction with the RSMWG (or for another alternative, see Section 7.4.6 on Regional Fisheries Advisory Councils) to allocate quota to the commercial sector and the remaining allocation to be distributed to the non-commercial uses, maybe even through ITQs, although some strict provisions on transfer between the recreational and commercial sectors would need to be established. Day-to-day management could continue under the management of each individual sector or jurisdiction as long the ecological objectives of the overarching management plan are met and quota is not exceeded. Annual reporting to the central body would be essential and this forum could provide an avenue for conflict management between resource users.

At present, the Framework envisages that the Minister's final allocation decision, based on the advice of the RSMWG, will be applied to the TAC (commercial) managed by the AFMA.⁹¹³ This is bound to reinforce the scepticism and suspicion held by industry and will undoubtedly meet with demands for compensation if the commercial quota is reallocated to

⁹¹⁰ Batstone and Sharp (1999).

⁹¹¹ *Indigenous catch* could be allocated via group recreational fishing licences as in Victoria's *Fisheries Act 1995* (as amended), s46.

⁹¹² *Aquaculture catch* here refers to wild catch that is farmed for grow out.

⁹¹³ DAFF. (2004). "Explanation of Framework." Support documentation for 4 February 2004 meeting of RSMWG.

recreational fishers and other resource users. Under the guise of a global TAC, the commercial catch should not need to be reallocated if it is shown that the fishery is sustainable under the strategic assessments of the EPBC Act. Since recreational and indigenous fishing are already occurring outside the assumed sustainable commercial catch, these new management components should simply be estimated and allocated a value. The global TAC would then comprise the commercial catch plus the newly allocated recreational and indigenous catch so that the fishery, as a whole, could be managed for ecological sustainability. This would mean that if reductions were required, they would be felt by the whole of the fishery, including all resource users under the overarching management plan equally and not primarily by the commercial users. Reductions for conservation purposes would also reduce the likelihood or need to pay out compensation.

7.3.3 Full Ecologically Sustainable Development reporting for Australian fisheries

The *National Strategy for ESD* refers explicitly to Ecosystem-Based Fisheries Management with specific objectives to meet herewith. One way to ensure fisheries are meeting these objectives is to adopt ESD reporting requirements in their entirety, as proposed in the *National ESD Reporting Framework for Australian Fisheries: The 'How To' Guide for Wild Capture Fisheries*. At present ESD reporting has been used for only the ecological aspects of fisheries. Reporting needs to be adopted for the social and economic aspects of the fishery as part of the management plans to determine impacts and to be able to manage for the whole of the fishery and its components.

The SESSF Plan and subsequent environmental accreditation under the EPBC Act illustrates the Commonwealth's commitment to ecologically sustainable management of Australian fisheries in terms of the economy and the environment. By omitting the social and cultural dimensions to fisheries management, ESD objectives are somewhat compromised. To overcome this omission, ESD Reporting in its entirety could be incorporated in the assessment of the SESSF Plan to highlight risks associated with social and indigenous interests in the regional fisheries. The ESD Reporting Framework includes eight components of ESD within three main categories. These are the:

- *Contribution of the fishery to the ecological well-being* (including retained and non-retained species and general ecosystems – all of which are covered in current fisheries management plans);
- *Contributions of the fishery to human well-being* (including indigenous, community and regional, national social and economic well-being – economic interests being the main one covered in current fisheries management plans in accordance with the

economic efficiency objective of the FMA, but remaining outside the scope of the EPBC Act, which neglects social and economic aspects); and

- *Factors affecting the ability of the fishery to contribute to ESD* (including the impact of the environment on the fishery and governance arrangements – this part would give fisheries a greater capacity to determine external influences on the ability of the fishery to meet its objectives).⁹¹⁴

Performance evaluation of issues raised from the component trees for ESD reporting requires an objective, an indicator and a performance measure to determine if the objectives are being adequately met and then suggestions as to the current and future fisheries management responses should they be triggered.⁹¹⁵ Determining the appropriate management responses to ESD indicator triggers is imperative to any good management plan and is something that is being evaluated in the Southern Regional Fisheries.

7.3.4 Management Strategy Evaluation

Management Strategy Evaluation (MSE) deals explicitly with the problems of uncertainty and can technically deal with the multiple objectives in striving for ESD and ecosystem-based fisheries management.⁹¹⁶ MSE is different from traditional fisheries management techniques in that it does not seek to provide an “optimal” solution for fisheries management, but rather it identifies the trade-offs between management objectives that occur when applying alternative management strategies.⁹¹⁷ The MSE approach relies on Monte Carlo simulation testing of the whole management process based on a set of pre-agreed performance measures that are derived from a set of pre-agreed operational management objectives.⁹¹⁸ It is at this stage of selecting operational objectives and specifying performance measures that the importance of stakeholder involvement is emphasised. This participative process means that there is a high level of peer review, and non-technical stakeholders are able to valuably input into the process, hence ensuring ownership and

⁹¹⁴ Fletcher, W.J., Chesson, J., Fisher, M., Sainsbury, K.J., Hundloe, T., Smith, A.D.M. and Whitworth, B. (2002). “National ESD Reporting Framework for Australian Fisheries: The ‘How To’ Guide for Wild Capture Fisheries.” FRDC Project 2000/145. Australia: Canberra: 8-9.

⁹¹⁵ Fletcher *et al* (2002): p8.

⁹¹⁶ Smith, A.D.M., Sainsbury, K.J. and Stevens, R.A. (1999). “Implementing Effective Fisheries-Management Systems – Management Strategy Evaluation and the Australian Partnership Approach.” *ICES Journal of Marine Science*, 56: 967-979.

⁹¹⁷ Punt, A.E., Smith, A.D.M. and Cui, G. (2001). “Review of Progress in the Introduction of Management Strategy Evaluation (MSE) approaches in Australia’s South East Fishery.” *Marine & Freshwater Research*, 52: 719-726; and Smith, Sainsbury and Stevens (1999).

⁹¹⁸ Sainsbury, K.J., Punt, A.E. and Smith, A.D.M. (2000). “Design of Operational Management Strategies for Achieving Fishery Ecosystem Objectives.” *ICES Journal of Marine Science*, 57: 731-741.

understanding of the evaluation results and potentially minimising future conflicts with the results.⁹¹⁹

The MSE approach has been limited to relatively simple models due to the relatively high levels of uncertainty and complexity involved with ecosystem-based objectives and interactions that have the potential to undermine the scientific defensibility of the process.⁹²⁰ There are no guarantees that the management strategies will work out in the real world as they do in the simulation. However, if a management strategy cannot meet management objectives in the relatively ideal situation of simulation, then there is no reason to believe in the real world with less ideal situations that they will achieve any more promising results.⁹²¹ Adopting MSE approaches in fisheries management is thus somewhat of an insurance policy and conflict management tool for managers, in that industry and other interested parties are also involved in the evaluation process, hence increasing communication between often traditionally conflicting parties and giving all parties an increased sense of ownership of the outcomes.⁹²²

The MSE approach also means that there is a likely chance of discovering at least what will not work, at least theoretically, in achieving the desired objectives, hence it reduces the costs and effort in practical application of redundant management strategies. This advantage illustrates how fisheries are moving to a more corporate approach of business management and could also prove to be advantageous in integrated oceans management dealing with often conflicting objectives of resource users. The wider application of MSE is being applied to the multiple-use management of the North West Shelf in Australia through the North West Shelf Joint Environmental Management Study (NWSJEMS) with somewhat successful results.⁹²³ Some limitations to the project are in the complexity and uncertainty involved in evaluating the impacts between users and the response of the ecosystem to the cumulative impacts of multiple user groups. However, eventually this analysis should link the ecosystem and human impacts to project the cumulative impact of multiple uses and the response of the ecosystem to a given management measure, thus offering a potential way forward for conflict management and marine planning in the implementation of RMPs.

Despite significant advantages, the MSE approach has not yet been applied effectively to economic or social objectives. This issue is being embarked upon, at least with respect to

⁹¹⁹ Sainsbury, Punt and Smith (2000).

⁹²⁰ Ibid.

⁹²¹ Punt, Smith and Cui (2001).

⁹²² Smith, Sainsbury and Stevens (1999).

⁹²³ McDonald, A.D., Sainsbury, K.J., Little, V.D., Gray, R. and Fulton, E. (2004). "Multiple Use Management Strategy Evaluation for a Coastal Marine Ecosystem." Coast to Coast Conference Proceedings. Hobart: 19-23 April 2004.

economic objectives, in the Southern Region Fisheries. In the Southern Regional Fisheries, the proactive development of the SESSF goes beyond the theoretical implementation of the SESSF Plan. In order to put the SESSF at the forefront of the practical implementation of Ecosystem-Based Fisheries Management, as committed under the *National Strategy for ESD* and building on ESD Reporting mechanisms, the Fisheries Research and Development Corporation, the AFMA and the NOO have jointly supported and funded a 3-year \$2 million "Evaluation of Alternative Management Strategies for management of the SESSF" (AMS) project with CSIRO.⁹²⁴ The objectives of the AMS project are to identify key economic and environmental issues facing the SESSF and the regional and fishery specific management objectives and strategies encompassing the full range of management measures available, then to evaluate integrated management strategies against regional and specific fishery management objectives and report them to the AFMA and the relevant MACs and stakeholders.⁹²⁵

7.3.5 Fisheries Observer Policy

Compliance is a reoccurring issue for fisheries management, which has most recently been addressed in the *Looking to the Future* document.⁹²⁶ This is especially so in high seas fisheries and with regard to IUU fishing activities in the AFZ, however, it is important that domestic fisheries are also monitored accordingly for compliance and data collection to be used in stock assessments. One way forward would be to develop a Fisheries Observer Policy for placing observers on vessels. An independent consulting company could be assigned the task of hiring a suite of observers for a minimum five-year induction period, for consistency and cost-efficiency of training. The company, in accordance with government and industry-agreed training measures, would train each of the candidates in the beginning, with refresher courses every year or two depending on the demands on the fishery and changes in policy or legislation. Once trained, each observer would be held accountable for their work in that if any intentional misreporting were found, all data from that observer would be omitted from the official record. Accountability is important, especially if funded in partnership with industry. The observer program should be expanded to cover at least 50% of the major producers within the commercial fisheries and should extend to also cover a percentage of the recreational, indigenous, charter and aquaculture industries in accordance with their contribution to the fishery as a whole. This would ensure compliance and benefit

⁹²⁴ AFMA Management. (2004). "Agenda Item 10.2: Alternative Management Strategies and Ecological Risk Assessment Projects Update." SETMAC85. February 2004. <http://www.afma.gov.au> [Access date: 6 June 2004]; and

Sachse, M. (2003). Personal communication and announcement at the Marine Ecosystems Workshop, Cronulla, NSW. 8-10 December 2003.

⁹²⁵ AFMA Management (2004) "Agenda Item 10.2:..."

⁹²⁶ AFFA. (2003). "Looking to the Future: A Review of Commonwealth Fisheries Policy." Canberra: Australian Government Publishing Service. Outcomes 39-42: 52.

integrated management through more accurate stock assessments and records of resource use.

7.3.6 *Conflict Management Toolbox*

Conflict management mechanisms have the potential to increase the capacity for integration when other instrumental and institutional arrangements are constrained by jurisdictional or sectoral conflicts, or when integration requires cooperation between parties with philosophical differences. The accessibility of these approaches to fishers and fisheries managers is currently limited by a lack of knowledge and awareness of these conflict management tools. The development of a web-based *Conflict Management Toolbox* for fisheries would provide opportunity for stakeholders to access tools and approaches to deal with conflict. The *Conflict Management Toolbox* would be similar in context to the Citizen Science Toolbox developed by the Coastal CRC in 2003, which offers free advice on appropriate stakeholder engagement mechanisms.⁹²⁷

The *Conflict Management Toolbox* would be a free resource for fisheries stakeholders, including managers and scientists, conservation interests and the general public, in dealing with potential and actual conflicts involving fisheries in Australia. In this respect, it offers potential to voluntarily enhance coordination within the fishery, with other fisheries and gear types, or with others sectoral interests. The website would list the full range of tools and approaches to conflict management as they apply to fisheries, giving clear examples of application and relationship to current management practices. It would also provide recommendations on the best tools to use for a given conflict, based on information provided by the website user. This information could include: the budget; the number of parties involved; the location of disputant parties; the complexity of the dispute; if confidentiality is to be maintained; if parties want direct negotiations; if parties want an ongoing relationship; and whether there is a need for binding resolution.⁹²⁸ The website would provide the public opportunity to openly discuss concerns with the industry through internet chat rooms. It would also be a valuable resource for managers and fishers through weekly or monthly news postings with respect to the resolution of particular fisheries conflicts, thus providing learning through set precedent for future management decisions.

Introduction of a *Conflict Management Toolbox* would demonstrate confidence in the industry to efficiently deal with their own disputes and is likely to take the onus off

⁹²⁷ Coastal CRC. (2003). "Citizen Science Toolbox." <http://www.coastal.crc.org.au/toolbox/index.asp> [Access date: 20 June 2004].

⁹²⁸ Fels, A. (1999). "The Growing Importance of Conflict Management." *Canberra Bulletin of Public Administration*, 92: 21-23.

government to mediate conflicts between resource users, so that they can concentrate their efforts on the ESD management of the resource. It also offers significant benefit in the developmental stage, when all existent and potential conflicts would be identified. This would give fisheries managers some clear insights into the potential risks and conflicts they may encounter in the future. The risk in establishing a free voluntary resource is that it will not be utilised enough to be economically viable. However, if it is successfully marketed such that just one conflict can be resolved outside the judicial system and relations between *any* stakeholders are improved, then it will arguably offer great benefit to the overall management system.

7.4 Institutional tools

To achieve the integration of management and the ecosystem-based management of our oceans, it is important that we establish the appropriate governance arrangements to deliver these outcomes, rather than modifying the outcomes to fit existing governance arrangements. Change of this magnitude is often difficult to achieve because of vested interests within Commonwealth, state and local governments and departments, private interests that benefit from the status quo and an often over-consulted community that are tired and cynical of change for the sake of change.⁹²⁹ Often, opposition within government to change from the status quo stems from inadequate staff training or an unwillingness for key individuals or agencies as a whole to endorse such structural change.⁹³⁰ However, just designing integrative institutional arrangements will not induce change within itself. The instrument of change is also required, whether that be new policy, legislation or a new approach to planning and management.

Do current integrated oceans management/ fisheries management institutional arrangements address the issues of integration (cross-jurisdictional / cross-sectoral / intra-sectoral) and conflict management?

Cross-jurisdictional integration is currently being addressed through the MACC's IOMWG of the NRMCC. However, this integration is limited cross-sectorally by the inclusion of only a few relevant ministers charged with oceans-related issues in each jurisdiction, an issue somewhat overcome by the inclusion of other Ministerial Council representatives. There is the capacity for current oceans management to address cross-sectoral issues through the NOMB at the senior decision-making level. This capacity, however, wanes towards the

⁹²⁹ Graham, B. (2002). "Governance and Development in the Coastal Zone: The Resource Assessment Commission Coastal Zone Inquiry 10 years on." Proceedings of the *Coast to Coast 2002* Conference. 4-8 November 2002. Tweed Heads, NSW: Coastal CRC: 121-124. <http://www.coastal.crc.org.au/coast2coast2002/proceedings/Theme2/Governance-Development-Coastal-Zone.pdf> [Access date: 31 May 2004].

⁹³⁰ Middle (2004): 11.

more operational level and does not include cross-jurisdictional decision-makers in anything other than an advisory capacity. Some proposals for institutional arrangements to support efficient implementation of integrated oceans management inclusive of and highlighting some effective conflict management provisions are presented in this section.

Cross-jurisdictional integration of Australian fisheries occurs through the AFMF. This forum includes all relevant Australian fisheries agency managers, and is therefore well suited to address cross-jurisdictional issues. Cross-sectoral integration of Commonwealth fisheries with other sectors is being addressed by the broadening membership of relevant MACs to include other interests, such as conservation interests. However, limitations pertain to the number of members allowed and the relative influence new interests have as they are generally included as observers only. And intra-sectoral integration of Australian fisheries is currently proceeding slowly through the RSMWG. As previously discussed, the successful implementation of many management or policy mechanisms depends on the efficient management of real and potential conflicts. Some alternative proposals for fisheries institutional arrangements that address the issue of integration and conflict management are proposed in this section.

7.4.1 An Integrated Oceans Management Inquiry by the Resource Assessment Commission

Conflict management in natural resource management is not a new concept for Australia. In the early 1990s the Resource Assessment Commission (RAC)⁹³¹, established under the auspices of the Commonwealth's *Resource Assessment Commission Act 1989*, was hailed as a success in offering practical solutions to conflicts between resource users in contentious issue areas. The RAC, or a similar body, could be re-instated for the assessment of resource use in the oceans in an IOM Inquiry, in line with the RAC's Coastal Zone Inquiry.

The RAC was 'sidelined' by Paul Keating when he came into power as Australian Prime Minister in 1991, as he believed that environmental policy was merely a 'sideshow' to economic policy.⁹³² While the RAC completed its final report on Coastal Zone Management, it was wound up in 1993. Although it is technically possible to reinstate a RAC for an IOM Inquiry, it is a theoretical rather than practical option, given governments' preference for the creation of new styles of governance rather than revisiting old styles.⁹³³ The RAC is included, however, as it provides an example of an institutional tool that could address integration. It is capable of addressing environment and development issues, the

⁹³¹ The RAC was created to provide autonomous advice to the Prime Minister, on complex and often contentious resource use issues of national importance, as referred by the Government.

⁹³² Haward, M. (2004). UTAS: Personal Communication – 8 June 2004.

⁹³³ Kaye, S. (2004). Personal Communication – 8 June 2004.

management of conflicting resource uses and it reflects an independence in peer review of government policy and management. The NOO, as an executive agency, could be seen to have adopted a similar assessment role as the RAC.

The RAC also examined impacts of various combinations of uses on resources and the environment and as such is not dissimilar to the MSE approach with respect to multiple-use management. However, it will still be some time before the MSE approach can be applied to the complexities of IOM:

7.4.2 Ongoing role for the National Oceans Office

As identified in Chapter 2, the main conflicts with the NOO have arisen from the uncertainty surrounding its ongoing role and the extent to which it adds value to management.⁹³⁴ In this section, a number of alternatives are offered for the ongoing role of the NOO after the development of RMPs that may provide some security for industry and government agencies alike.

7.4.2.1 Clearing House for Oceans Policy and Legislation

As discussed in Section 7.1.1, a marine-based policy and legislative “clearing house” would be ideally situated in the DPM&C given its role as government policy coordinator. However, it is recognised that the NOO has developed the expertise and has been in the process of building up a legislative and policy “assessment” of our oceans over the last four years. It would therefore make sense for the NOO to retain this role by making it a requirement that agencies and governments register any new oceans management related legislation or policy with the NOO before implementation. This would put the NOO in a better position to advise on integration issues and to pre-empt any potential areas of conflicting use. As Australia moves to embrace the states in oceans management and planning through the integrated oceans management initiative, it would also be beneficial for the NOO to maintain this register inclusive of the states’ legislative and policy developments to ensure consistency across jurisdictions and to maintain a focus towards integrated oceans management.

7.4.2.2 Independent Assessment Board for Planning Approvals under a tenure allocation regime

If an *Integrated Oceans Management Act* were introduced as planning legislation requiring application for tenure of ocean uses and activities as proposed in Section 7.2.3, then a role

⁹³⁴ From interview with subject LX67.

for the NOO would be for planning approvals in accordance with the objectives of AOP and regional marine planning. The NOO would have the power to approve tenures in Commonwealth waters only and by doing so would have the potential to record the cumulative impacts on any given bioregion. This would involve the review and amendment of current legislative approvals, such as fisheries approvals under the *Fisheries Management Act 1991*, so that they fall under this new legislation. Entrusting this approval system to an executive agency such as the NOO would remove planning and management of the oceans resources from the direct political influence of any one minister that is apparent in normal government departments. The NOO is answerable to five Commonwealth ministers involved in oceans management and planning, therefore no one minister should have the power to unduly weight decisions on political whims, but rather approvals and planning should be made for the ESD objectives of integrated oceans management.

7.4.2.3 *Monitoring of RMP implementation – regional offices*

Another proposal for the future of the NOO is for the decentralised regionalisation of its office. This would mean that the NOO would comprise a series of regional offices to support the implementation and monitoring of each Regional Marine Plan, themselves answerable and supported by a central Canberra-based policy coordination office.⁹³⁵ Regional offices would help give AOP and RMPs access to a regional voice and local communities would be able to see that regional plans are being managed by regional officers. With a regular contact point, local communities would gain a sense of ownership of the RMPs, potentially leading to reductions in enforcement and compliance expenses. At present, in the eyes of many of the public, RMPs are offshore plans run by bureaucrats at sometimes great distances from the region concerned, therefore instilling little confidence that they actually know or can understand the issues involved. Offshore plans and processes are difficult to 'sell' to those directly impacted by decisions let alone the general public. Offshore regions are not usually accessed or used by the general public and are not highly visible, hence 'out of sight – out of mind'. It is therefore important to give the offshore area a visible anchor, such as regional offices where people can access information to remind them of the activities that may be affecting them which are out of sight.

The role of the regional offices would be to monitor the implementation of the RMP for that given region using the performance assessment system and to report this information to the central Canberra-based office. Regional offices would have the scientific power to adequately monitor the region for meeting its operational objectives and would advise the central office on recommended management strategies to meet future objectives. To ensure

⁹³⁵ From interview with subject LX67.

consistency in approach and to take advantage of the potential for policy learning that may occur between regions, it is important that regional offices convene on specific issues at least annually. This would potentially reduce the learning curve through networking and would ensure that a national approach would be taken, although flexibility in which specific approach to take is mandatory given the complexities and differences between regions.

These regional offices could even replace the Regional Integrated Oceans Management Advisory Councils (see Section 7.4.5) proposed, to then feed into a Canberra-based national policy coordination NOO, which would be answerable at this stage to the NOMB, or potentially in the future to the Integrated Oceans Management Ministerial Council (see Section 7.4.3). The central Canberra-based policy coordination branch of the NOO is imperative to ensure RMPs are adhering to national policies and approaches and to guide future plans and directions through the principle of subsidiarity.

7.4.2.4 Secretariat to the relevant Ministerial Council

Once RMPs are developed for all Australian waters under AOP and integrated oceans management supersedes AOP by embracing the states, the ongoing role of the NOO may be as secretariat to the Integrated Oceans Management Ministerial Council (IOMMC – see Section 7.4.3), or to the current IOMWG of the NRMMC. As secretariat, the NOO would be responsible for coordinating submissions to the relevant Ministerial Council. However, the NOO would conceivably be capable of extending its power beyond simply secretariat to also proactively coordinate policy and direct management and integration issues related to integrated oceans management. The role of secretariat could also be amalgamated with the role of policy coordinator as proposed in Section 7.4.2.3.

7.4.2.5 Mediator for regional multiple-use management

Given that multiple-use planning of our offshore marine regions is not likely in the near future, one potential ongoing role for the NOO could be as a mediator for random localised multiple-use management, as in the Otways case study. Instead of planning for multiple use for the whole region, conflicts between users could be referred to the NOO for resolution as and when they arise. There are advantages and disadvantages to having an independent mediator. Many stakeholders will dismiss the “interference” of a third party such as the NOO because of a lack of knowledge and experience with sometimes deep seated and protracted issues of conflict. If there is a long history between conflicting users, there is often a belief that any third party will not understand the full context of the argument and may inadvertently dismiss one part or the other. The other side of the argument for an independent mediator is that often deep seated conflicts need fresh minds to divert conflict

away from what parties want and refocus them on what they collectively need. Often in doing this, parties will find that they have commonalities and can resolve the issues themselves after all. The NOO would be a good independent mediator to these conflicts as they have developed a sound understanding of the range of issues through regional marine planning and would be able to focus conflicts to adhere to AOP and RMPs. To successfully achieve in this role, however, they would require mediation training, something which they are currently lacking and a fact that is well noted by reluctant stakeholders to this process.

7.4.3 *An Integrated Oceans Management Ministerial Council*

At present, IOM issues are addressed by the IOMWG of the MACC, which is a joint committee of the NRMMC and the Primary Industries Ministerial Council (PIMC). The NRMMC comprises ministers of the crown *to promote the conservation and sustainable use of Australia's natural resources*⁹³⁶, but only includes the Commonwealth Minister for Agriculture, Fisheries and Forestry and the Minister for Environment and Heritage. The PIMC comprises ministers of the crown *to develop and promote sustainable, innovative and profitable agriculture, fisheries/aquaculture, and food and forestry industries*⁹³⁷, but only includes the Commonwealth Minister for Agriculture, Fisheries and Forestry. *Australia's Oceans Policy* and regional marine planning are the responsibility of the NOMB comprising five Commonwealth Ministers responsible for the environment (chair), industry, resources, fisheries, science, tourism and shipping.⁹³⁸ Evidently, integrated oceans management issues are becoming increasingly “cross-cutting” and do not fit the traditional ministerial boxes that currently contain oceans management issues.⁹³⁹ In terms of Commonwealth decision-making, cross-sectoral integration is not adequately met in the current IOM framework and cross-jurisdictional integration is not adequately met in the current AOP framework. Integration of AOP and IOM requires that IOM issues are also addressed by the Ministers of the NOMB.

A major impediment to the states signing on to a national oceans policy in the first place was that there were no state ministers included in the decision-making body, the NOMB. This has been somewhat overcome for the states through the development of IOM through the

⁹³⁶ Natural Resource Management Ministerial Council. (2004). “About the Natural Resource Management Ministerial Council (NRMMC).” http://www.mincos.gov.au/about_nrmmc.htm [Access date: 15 June 2004].

⁹³⁷ Primary Industries Ministerial Council. (2003). “About the Primary Industries Ministerial Council (PIMC).” http://www.mincos.gov.au/about_pimc.htm [Access date: 15 June 2004].

⁹³⁸ Bergin, A. and Haward, M. (1999). “Current Legal Developments: Australia.” *The International Journal of Marine and Coastal Law*, 14: 387-398; and Commonwealth of Australia. (2003). “Oceans Policy: Principles and Processes.” Hobart: National Oceans Office: 9.

⁹³⁹ Peters, B.G. (1998). “Managing Horizontal Government: The Politics of Co-ordination.” *Public Administration*, 76 (Summer): 295-311.

MACC, which involves relevant state ministers and departmental heads. However, membership is limited to those involved in natural resource management and primary industry issues. The example of the Commonwealth AOP process has clearly indicated that true cross-sectoral integration within jurisdictions will require that a broader membership be incorporated and should thus apply also to the states.

To overcome limitations of the current regime, it is proposed that an Integrated Oceans Management Ministerial Council (IOMMC) be established, reflecting the original proposal by the Ministerial Advisory Group on Oceans Policy in 1998.⁹⁴⁰ The IOMMC would include Commonwealth ministers of the NOMB and all relevant state ministers. Relevant state ministers would, as in the development of AOP, include those responsible for environment, industry, resources, fisheries, science, tourism and shipping in each jurisdiction. It is recognised that the current COAG guidelines presumes against the creation of new Ministerial Councils.⁹⁴¹ However, it is questionable how effective IOM will be through a Working Group (the IOMWG) of a joint Committee (the MACC) that is not even responsible to all the ministers involved in oceans planning and management at the Commonwealth level (the NOMB). If Australia is serious about the ecologically sustainable development and conservation of our oceans, perhaps there needs to be a greater commitment to facilitated consultation and cooperation between governments, to develop policy jointly and to take joint action in the resolution of issues with respect to national cross-sectoral and cross-jurisdictional integrated oceans management.⁹⁴²

⁹⁴⁰ Environment Australia. (1998). "Australia's Oceans Policy." Report of the Ministerial Advisory Group on Oceans Policy. March 1998; and

See Figure 9 for a proposed IOM Institutional structure.

⁹⁴¹ Agreed to by COAG on 8 June 2001: Department of the Prime Minister and Cabinet. (2002).

"Commonwealth-State Ministerial Councils – A Compendium." Canberra: DPM&C. June 2002: 6.

⁹⁴² Ibid: 1.

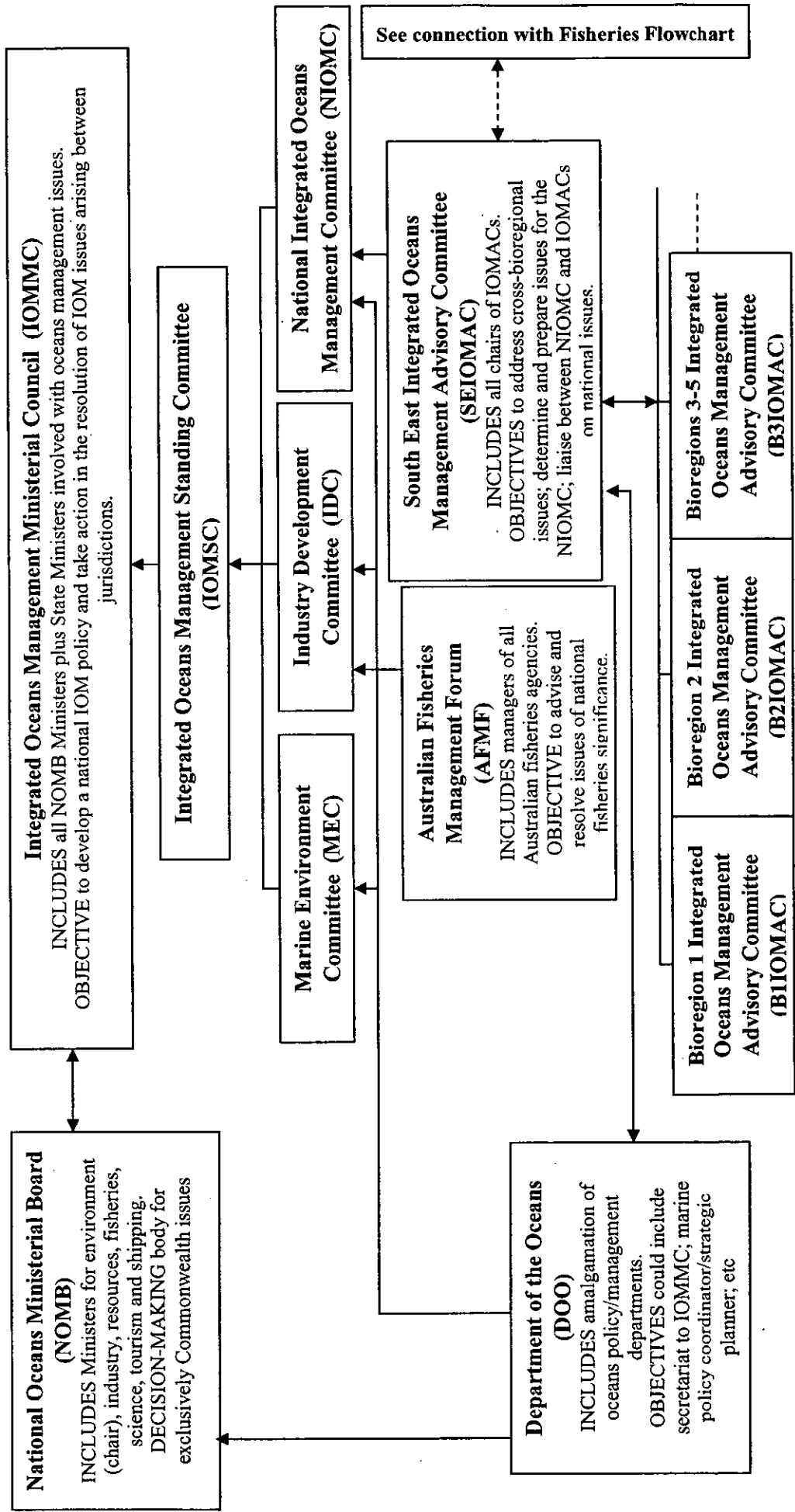


Figure 9 One proposal for the institutional structure of the South-East Region's Integrated Oceans Management regime.

7.4.4 Department of the Oceans

To overcome traditional sectoral management boundaries and work towards the practical implementation of ecosystem-based management, a Department of the Oceans (DOO) could be established. Given the complexity and enormity of the role such a department would need to play, there are several options for implementation.

The first option would be for the DOO to be answerable to the NOMB as the formal mechanism for integrating policy at the most senior level.⁹⁴³ Portfolios of departments currently associated with and involved in AOP development and implementation would be amalgamated under the umbrella of the DOO. This would enhance policy cohesion towards the ecosystem-based management objectives of AOP by streamlining processes by reducing the number of individual departmental checks and by reducing the capacity for competing interests at the departmental level.⁹⁴⁴ Conflicts between sectors would need to be resolved at the departmental level to meet the overarching departmental objectives for integration, rather than at the senior ministerial level that may be swayed by the politics of the day.⁹⁴⁵ It would potentially reduce the inefficiencies of attempting to integrate several, often conflicting, departmental objectives with respect to oceanic resource use. Amalgamation has the potential to produce better policies, but there is also the risk that policy options will be limited due to the lack of competition. The 1987 public service amalgamations showed the negative risks to be slight and that the amalgamation of 27 to 16 departments proved effective in increasing interdepartmental efficiencies and more cohesive policy coordination, even though these benefits were practically slower than expected to realise.⁹⁴⁶ A DOO would have relatively slow realising benefits due to the seeming opposing nature of the objectives of some sectors involved (for example, the petroleum industry and conservation). However, by working towards the ecologically sustainable development of our oceans taking in ecosystem-based management principles, the DOO should prove to break down traditional sectoral barriers and coordinate resource use more effectively than across separate departments with often polarized mandates. In a sense, this would be a forced type of conflict resolution.

⁹⁴³ Craswell, E. and Davis, G. (1993). "Does the Amalgamation of Government Agencies Produce Better Policy Coordination?" In: Weller, P. Forster, J. and Davis, G. (eds). *Reforming the Public Service – Lessons from recent experience*. Queensland: Centre for Australian Public Sector Management: 180-207; and

See Figure 9 for a proposed IOM Institutional structure.

⁹⁴⁴ Craswell and Davis (1993).

⁹⁴⁵ Ibid.

⁹⁴⁶ Ibid.

A second option is for the DOO to be answerable to an overarching Minister for Oceans, supported by a sweep of junior sectoral ministers. This framework would allow for the current sectoral arrangements to continue as separate branches of the overall department, each answerable to a junior sectoral minister, working towards the same overarching goal of ESD to maintain marine ecosystem health and viable industries. This framework would rely on a combination of formal senior level approaches with more informal mechanisms such as the use of policy networks to aid interagency coordination under the oceans management umbrella. Branch separation would ensure that intra-sectoral integration is maintained and effectual, whilst working to a Minister for Oceans would give the Minister a broad view of the issues, free of politically sectoral ties (as with the junior ministers), so as to maintain cross-sectoral integration and to prevent inconsistencies between branch mandates.

7.4.5 *Integrated Oceans Management Advisory Councils*⁹⁴⁷

Instrumental change and advancements with respect to the integrated management of our oceans are not uncommon in Australia. What is becoming more evident however, is the need for institutional change to overcome the present jurisdictional and sectoral constraints that are hindering the effective implementation of these reforming policies and approaches. Not dissimilar to the WCVIAMB, Integrated Oceans Management Advisory Councils (IOMACs) are one possible means for addressing the need for practical integrated oceans management. IOMACs would be responsible for advising on the ecologically sustainable development of bioregions in accordance with ecosystem-based management principles, within large marine ecosystems, similar to those identified in AOP but inclusive of state and coastal waters as well. IOMACs would be linked to national policies, such as an IOM National Policy and a National Coastal Policy, by the principle of subsidiarity.⁹⁴⁸

Each IOMAC would comprise a representative sample of the interests in the bioregion of concern. These interests would include cultural, economic, social, conservation, scientific and public good interests through representative government. The exact composition would vary according to the bioregion and some IOMACs would cover several bioregions depending on the similarity of the interests involved. The number of bioregions requiring IOMACs could prove quite cumbersome, therefore the number of IOMACs in each Region would need to be limited. A compromise must be reached between managing too many

⁹⁴⁷ This section has been adapted from the following paper by the author, with permission from the co-author (see Appendix One for signed permission forms):

Foster, E.G. and Haward, M. (2003). "Integrated Management Councils. A Conceptual Model for Ocean Policy Conflict Management in Australia." *Ocean & Coastal Management*, 46: 547-563.

⁹⁴⁸ See Figure 9 for a proposed IOM Institutional structure.

small areas independently, which can lead to “the tyranny of small decisions”⁹⁴⁹, and the difficulties of effectively managing large areas at the operational level.

A typical council would comprise at least two representatives of each of the federal, state and, where applicable, local governments as well as at least one indigenous representative. At least two representatives of each level of government are required in recognition of the fact that there may in fact be several departments involved in the management of the bioregion. This could be simplified, at least at the Commonwealth level, through the establishment of a DOO (see Section 7.4.4) from which federal representation could be provided. Other non-government interest groups include, amongst others: fisheries; oil and gas; conservation; tourism; transport and shipping; and the general public. Although the size of IOMACs would reflect the complexity of the bioregion, for procedural management it is reasonable to expect that non-government membership should not exceed ten representatives and that no more than one-third of these should be representative of any one interest group. This would eliminate the possibility of domination by any one interest group that might lead to intimidation, hence would thwart the process. Members would select a non-government chair in annual rotation with at least biannual meetings. Funding would be primarily from the three levels of government according to their jurisdictional responsibilities with perhaps a minor contribution from non-government representative groups. To ensure a sense of equality, all non-government groups should have to raise a nominal fee for participation, which could obviously be waived on consensus by the IOMAC involved, or governments could provide some form of grant scheme to assist representative stakeholder groups be involved.

The broad objective for IOMACs would be:

To allocate ocean resources to a mix of uses and monitor these uses (including direct, indirect and cumulative impacts on the ecosystem) within a planning area that offers the greatest long-term community benefits (taking economic, environmental, social and cultural values into account) compatible with maintaining the ecosystem health and sustaining viable industries.⁹⁵⁰

With this overarching objective in mind, IOMACs would be responsible for providing advice on whether current Commonwealth, state/territory and national policies and regulations meet the conservation and sustainable development objectives for the bioregion and for providing

⁹⁴⁹ House of Representatives Standing Committee on Environment, Recreation and the Arts. (1991). “The injured coastline.” Canberra: Australian Government Publishing Service: 46.

⁹⁵⁰ Adapted from: Commonwealth of Australia. (1998). “Australia’s Oceans Policy.” Canberra: Environment Australia: 37.

advice on the future needs of the bioregion to meet these objectives, in terms of management and research requirements. Given the often complex and financially demanding nature of monitoring and compliance, any advice given would be limited to anecdotal or qualitative advice with scientists and management agencies retaining responsibility for quantitative monitoring. IOMACs would also be responsible for providing advice on the functionality of various management strategies and potential future management responses. At regular intervals (biannually) the chairs of each IOMAC in each large marine ecosystem region (for example, the South-east Region) would meet to discuss cross-bioregional issues. This Regional IOMAC would also be responsible for determining any issues to be taken forward to the relevant national decision-making body, in this case envisioned as an IOM Committee of the IOMMC (see Section 7.4.3), and for acting as liaison between IOMACs and the national IOM Committee by providing reports to the IOM Committee pending decision and passing on decisions and guidance from the IOM Committee to the individual IOMACs.⁹⁵¹ The IOM Committee would be responsible for maintaining a national approach to integrated oceans management and for guiding Regional IOMACs towards this end.

IOMACs would be advisory in nature, but much like the fisheries MACs, their 'power' would be held in the inclusive consensus voting approach to deliberations. A consensus-based approach to decision-making would ensure a sense of ownership by all members as long as IOMACs work towards effective decisions rather than lowest common denominator approaches. The inclusion of local, state and federal government representatives, who can drive change in their constituencies to the decision-making forum and would be bound to act on decisions of the IOMACs to ensure they retain legitimacy and reflect responsiveness to local needs, also adds considerable 'power' to these bodies. Also not dissimilar to fishery MAC's advice to the AFMA Board, should advice from an IOMAC be rejected by the IOM Committee, the reasons for such rejection must be clearly presented to the IOMAC in question.

One of the greatest limitations of IOMACs would be reluctance of government and other management agencies to cede any responsibility to such bodies for fear of losing control or due to a lack of confidence in the ability of the IOMAC to adequately address pertinent issues.⁹⁵² Governments are also reluctant to entertain the concept of devolving decision-making power to any regional body as this involves handing over expenditure allowances and expenditure of public money cannot be made by any body other than the government entrusted with it on behalf of the Australian public, hence IOMACs would have to be

⁹⁵¹ See Figure 9 for a proposed IOM Institutional structure.

⁹⁵² Cassells, D.S. and Valentine, P.S. (1988). "From conflict to consensus – towards a framework for community control of the public forests and wildlands." *Australian Forestry*, 51 (1): 47-56; and From interview with subject ZA91.

advisory in nature.⁹⁵³ These are legitimate concerns, but can be addressed by focusing the role of government agencies on national and state coordination and compliance rather than local level planning. IOMACs would focus on the strategic management and monitoring of bioregions, whilst strategic management would remain the responsibility of the applicable department or agency. Another drawback with the establishment of IOMACs is that there is a risk of effort shift towards legislation of these integrated bodies while integration is still being defined, but there is a distinct need for a harder line in the future as these issues are worked through, especially with respect to compliance and enforcement.⁹⁵⁴

7.4.6 Regional Fisheries Advisory Councils and the National Fisheries Allocation Board

Overarching management plans for regional fisheries need to be developed outside the AFMA process, which is predominantly a commercial fisheries allocation and management process. Integration under the SERMP indicates that fisheries should be better preparing themselves with a unified voice in the emerging integrated oceans management process. The establishment of Regional Fisheries Advisory Councils, in line with the large marine ecosystem model of regionalisation, is one possible means for advancing intra-sectoral integration and aiding conflict management in Australian fisheries. For example, a Southern Regional Fisheries Advisory Council (SRFAC) could be established covering the area of the AFMA's Southern Region Fisheries, which coincides with the SERMP.⁹⁵⁵ The SRFAC would comprise of representative of each of four committees. These committees would be:

- the Southern Commercial Fisheries Advisory Committee (SoCFAC) – including MACs with jurisdiction in the South-east RMP area – such as the SESSFMAC – which includes the SETMAC, GABTMAC and GHATMAC – to advise the AFMA Board on the allocation of the commercial TAC between relevant commercial fisheries in the SESSF (that is, maintain its current role) – the SoCFAC would advise the SRFAC on commercial allocation issues/needs and management arrangements in the South-east;
- the Southern Recreational Fisheries Advisory Committee (SReFAC) – including recreational fishers and/or representatives in the South-east – to advise the SRFAC on recreational allocation issues/needs and management arrangements in the South-east with respect to each commercially fished species;
- the Southern Indigenous Fisheries Advisory Committee (SIFAC) – including traditional indigenous consultation between affected indigenous communities –

⁹⁵³ From interviews with subject NT49 and ZA91.

⁹⁵⁴ TFG International. (2002). "Review of the Implementation of Oceans Policy." Final Report. 25 October 2002.

⁹⁵⁵ See Figure 10 for a proposed integrated Fisheries Management Institutional structure.

would advise the SRFAC on indigenous allocation issues and cultural needs in the South-east with respect to each commercially fished species; and

- the Southern Aquaculture Fisheries Advisory Committee (SAFAC) – including any aquaculture representatives in the South-east – to advise the SRFAC on aquaculture interests and allocation issues in the South East with respect to each commercially fished species.

The SRFAC would comprise: a Government Chair (DAFF) to ensure Government policy and legislation with respect to resource sharing are adhered to; a nominated representative of SESSFMAC representing commercial interests; a nominated representative of SReFAC representing recreational interests; a nominated representative of SIFAC representing indigenous interests; and a nominated representative of SAFAC representing aquaculture interests. Amongst other objectives, the primary objective of the SRFAC would be to advise the National Fisheries Allocation Board (see below) on an overarching management plan, including the allocation of a global TAC and the relevant distribution to each sector.⁹⁵⁶ Other roles of the SRFAC would include: dispute resolution; producing annual performance reports to determine if the objectives of the overall management plans have been achieved; and advising the South-east Integrated Oceans Management Advisory Council (see Section 7.4.5) on pertinent fisheries issues in the South-east.

The National Fisheries Allocation Board (NFAB) would include nominated representatives of all the Regional Fisheries Advisory Councils (RFACs). The NFAB's primary objective would be to ensure national consistency and to approve, based on recommendations from the RFACs, the set intra-sectoral allocations for each fishery and to approve the overarching management plans for submission to the Minister for Fisheries. The Minister for Fisheries would have the ultimate power of veto, but like the AFMA Board, the NFAB would operate as an independent decision-making authority.

⁹⁵⁶ See Figure 10 for a proposed integrated Fisheries Management Institutional structure.

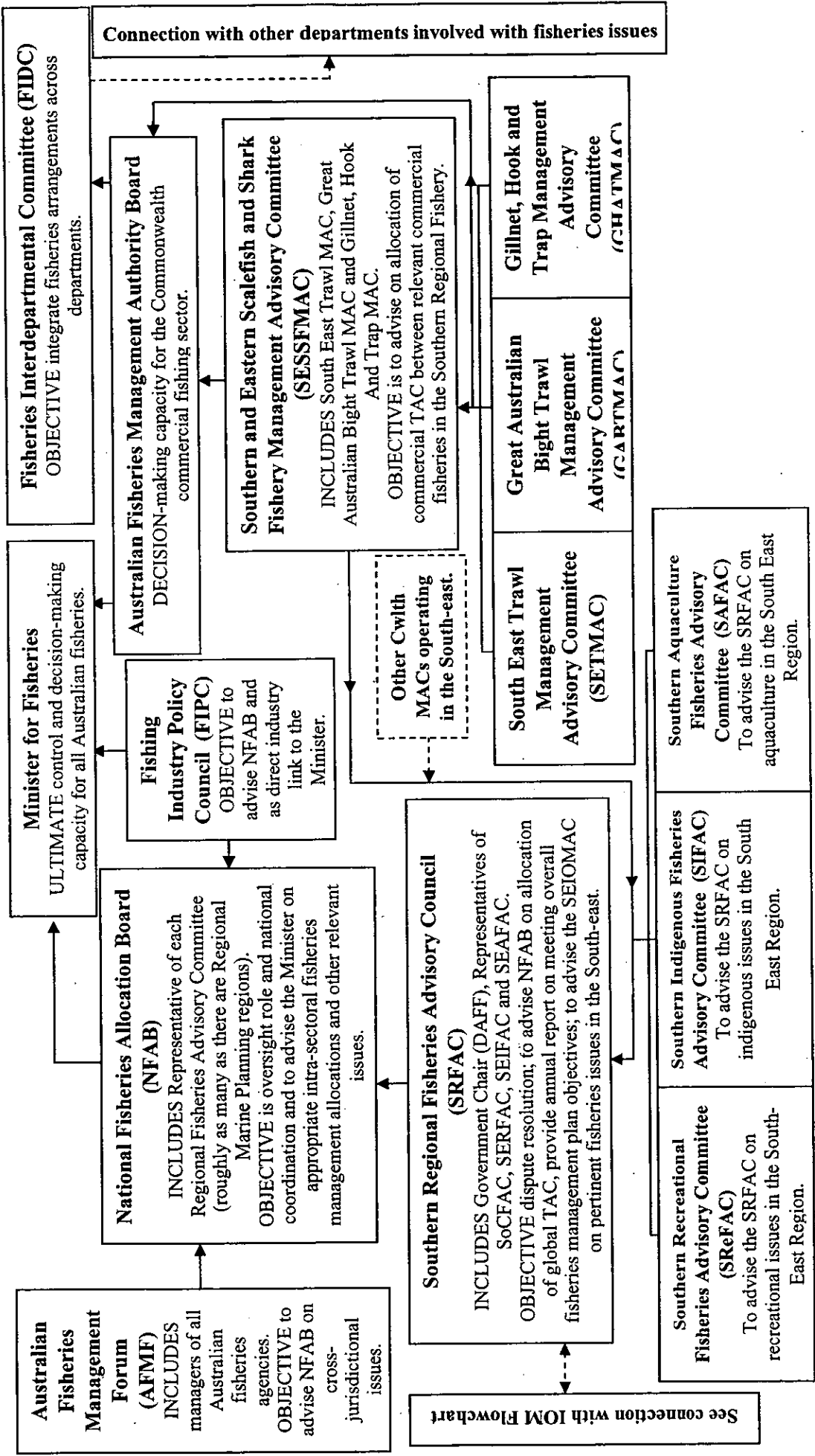


Figure 10 One proposal for the institutional structure of the South East Region's fisheries.

7.4.7 *Regional Fisheries Management Forums*

The Australian Fisheries Management Forum (AFMF) comprises the CEO or Director of all Australia's fisheries management agencies. Other agencies, such as BRS, CSIRO, and EA, can progress issues through the sub-committees of the AFMF. The AFMF's purpose is to:

- provide a mechanism to support the development of new Ministerial Council and Standing Committee arrangements for fisheries, aquaculture and related matters;
- provide a regular forum for discussion of issues and policies relevant to the group – national fisheries issues – and to resolve any contentious issues possible;
- support and give accountability to fisheries related committees, such as the Research sub-committee, the Compliance sub-committee, the Aquaculture sub-committee and the Environment and Health sub-committee; and
- provide a process for key issues to be forwarded to the Standing Committee/Ministerial Council.⁹⁵⁷

The AFMF is not a formal part of the MACC/Standing Committee/Ministerial Council structure, but it does informally feed into the MACC and the cross membership between the AFMF and the MACC facilitates the profile of fisheries issues through the Ministerial Council level.⁹⁵⁸ If a new IOMMC were formed, it would make sense that the AFMF would then feed into this body instead through the appropriate committee, such as an Industry Development Committee and also to the NFAB.

To assist the implementation of regional fisheries management, it would be beneficial to have Regional Fisheries Management Forums, which are subsets of the AFMF. For example, in the south, the Southern Fisheries Management Forum (SFMF) would comprise CEOs or Directors of Southern Australian fisheries agencies, including the Commonwealth, South Australia, Tasmania, NSW and Victoria. This provides an avenue for valuable cross-jurisdictional integration of fisheries issues at the regional level, such as integration of the SESSF Plan with southern state fisheries and recreational fisheries plans and other OCS arrangements, and a significant avenue in to the Ministerial Council level through the AFMF. Being an informal process, it provides an opportunity for the resolution of contentious issues between jurisdictions without the need for formal adjudication processes.

⁹⁵⁷ AFMF Meeting 1. "Terms of Reference and Objectives." NSW: Sydney. 12 February 2002. Agenda Item 4.

⁹⁵⁸ AFMF Meeting 1. "Operational Structure of AFMF." NSW: Sydney. 12 February 2002. Agenda Item 5.

7.4.8 *Fisheries Interdepartmental Committee*

Integration, as raised in the RMP process, could be enhanced by the establishment of a coordinating body, such as a Fisheries Interdepartmental Committee (FIDC) that deals with fisheries under the EPBC Act, MPAs, RMP, Bycatch Policies and the National Coastal Policy. A FIDC would be beneficial in coordinating simple things like definitions, but also to ensure that fisheries are not excessively scrutinized by different departments under the changing legislative and policy frameworks of the Government. There is an opportunity to assess all the requirements of fisheries and to work towards a comprehensive reporting process that would provide consistency of approach for at least some elements of these frameworks to minimise duplication. For instance, it would be useful to coordinate the descriptive elements of the strategic assessments carried out under the EPBC Act with the descriptive elements of fisheries assessments required for international environmental accreditation (such as for Marine Stewardship Council certification) to avoid duplication of effort down track. These coordination measures happen on a bilateral, or even multi-lateral basis in some cases, but coordination across the full sweep of fisheries regulations and arrangements is unlikely without such a body in place. The establishment of an annual Australian Fisheries and Seafood Forum⁹⁵⁹ is a positive step towards this end, however, the scope of this forum and its membership and the extensive time between meetings would indicate that it could not meet the immediate needs of dynamic integrated fisheries management.

7.4.9 *Fishing Industry Policy Council*

The *Fisheries Administration Act 1991* clearly identifies the objectives, functions and establishment guidelines for a Fishing Industry Policy Council (FIPC). Whilst this body has not yet been formed, there is an increasing need to execute such a body. As outlined in the legislation, this body would comprise commercial, recreational, environmental, research, government and any other representatives connected to the industry as determined by the Minister.⁹⁶⁰ It has the potential to facilitate an exchange of views between all those interested in the industry, hence to develop a unified approach to matters affecting the industry and thus forms the basis for effective proactive internal conflict management within the industry and external with environment and research interests.⁹⁶¹ It seems that as we move into the realm of resource allocation between sectors and increased environmental scrutiny, a body such as this would be beneficial pre-empting some of the angst caused by conflicting demands of different sectors on the industry and effectively forewarning the

⁹⁵⁹ AFFA (2003) "Looking to the Future...": 40.

⁹⁶⁰ *Fisheries Administration Act 1991* (Cwlth), s102 (1).

⁹⁶¹ *Fisheries Administration Act 1991* (Cwlth), s97.

Minister to these potential conflicts, whilst giving industry the opportunity of having a direct link to the Minister other than through the AFMA or DAFF. As an inclusive body, it has the potential to act as an advisory body to the National Allocation Board proposed above to ensure the legitimacy of the RFAC, or even in place of this body, should the representation be appropriate (see Section 7.4.6). A direct link to the Minister would be sure to give the industry a better sense of ownership and confidence in the management process. However, the draw back from using such a body is that it is ministerially appointed and this may in itself instil some suspicion in stakeholders as to the independence and unfettered advice that may culminate. It is recognised that the AFMA Board has become the major conduit between industry and government, but it is limited in its scope and the industry has lost some confidence in the AFMA over the years.

7.4.10 Fisheries Management Advisory Committee Reform

The SERMP alludes to the fact that the expertise of MAC members should cover all key stakeholders in the fishery. In part, this is addressed in the Fisheries Management Paper (FMP) No.1 through the inclusion of all relevant areas of expertise in membership of the MACs. However, the numbers are limited and membership is only semi-flexible through the allowance of Permanent Observers. Permanent Observers, however, must go through the cumbersome bureaucratic approvals process, as occurred with the approval of EA (now DEH) as a Permanent Observer. It is also a little naive to think that if the issues facing the fishery are predominantly to do with research at the time, that more research members would be appointed taking over any industry member's places. The fact is that industry membership is very unlikely to reduce in numbers to open up space for other interests. Therefore, if the MACs were to become more representative of expertise covering all stakeholders, perhaps a change in the legislative number of members needs to be addressed. To avoid members taking on an advocacy role, a change to the reference of individual members should mean that all members are referred to as SBTMAC members (for example), instead of specific reference to *industry* members, *conservation* members, etc. This would do away with the connotations of representativeness that exists at present.

There is also possibility for a stakeholder reference group to convene external to each MAC, with the objective of providing advice to the MACs where appropriate. This should be a pre-determined group of representatives that are 'on-call' to convene at the MAC's will, but no more often than MACs are convened. This group should be representative of the stakeholders involved in the fishery rather than expertise-based, therefore offering all stakeholder groups a voice in management decisions via the expertise-based MACs that would ultimately pass on advice to the AFMA Board. A nominated representative of these stakeholder reference groups should be a Permanent Observer on the MACs.

Where consensus cannot be reached by reasonable and mature debate, instead of passing the onus onto the AFMA Board to determine the overall feeling of the MAC from Minutes and the Chair's Summary, perhaps a further formalised conflict management process should be implemented. This could be through the use of an independent facilitator, such as the Executive Officer or an AFMA employee unrelated to the fishery. To avoid prolonged discussion, parties would be required to reach a mutual agreement with the help of the facilitator in a set time frame to present to the AFMA Board along with the full record of discussions. Another alternative would be to record all discussions clearly but as a last alternative, indicate support for arguments by show of hands. This approach runs against AFMA's current policy and as such would require a change to the FMP No. 1. Yet another option would be to provide the AFMA Board with a set of decision rules that would satisfy all concerns of MAC members. This would not only offer the Board a substantial picture of discussions within the MAC, but would provide a constructive way forward for the Board should they chose to accept the recommendations.

7.5 Summary

The thesis aimed to identify tools and approaches for the efficient implementation of fisheries management under the guise of regional marine planning. Building on the information gathered with respect to international and national advances in natural resource management towards integration, including conflict management techniques, this chapter provided some insights into alternative approaches that may be adopted in Australian fisheries and integrated oceans planning and management. It was found that while instrumental oceans management appears to embrace the concept of integration and conflict management through inclusive processes, institutional arrangements at the operational level have been slow to realise. A variation on the concept of multiple-use zoning has been revisited as well as some institutional changes, including the development of an Integrated Oceans Management Ministerial Council that reflects the current move towards cross-jurisdictional integrated oceans management, and complementary proposals, including the development of Regional Integrated Oceans Management Advisory Councils, designed for the operational implementation of integrated RMPs.

Fisheries have been relatively focused on internal commercial conflicts between gear users and between commercial fisheries. In light of the ecosystem-based management objectives under the National ESD Strategy, strategic assessments under the EPC Act and integrated management obligations under the SERMP, fisheries have moved to address broader issues of integration such as intra-sectoral integration with recreational and indigenous fishers and at least coordination with other sectors such as petroleum and conservation. Some regional approaches to management, such as the development of regional OCS arrangements and overarching fisheries management plans, have been proposed along with some institutional arrangements to better address cross-sectoral integration in the context of the SERMP, including the establishment of Regional Fisheries Advisory Councils. Participative processes are highlighted as the greatest tool for conflict management, however, alternative dispute resolution techniques and training are also prioritised as valuable to expedite conflict resolution processes. The identification of these processes and improved accessibility to industry are proposed through the development of a Conflict Management Toolbox website.

CHAPTER 8: CONCLUSION

8.1 Introduction

This thesis examined key issues affecting the implementation of fisheries management within Regional Marine Plans (RMP) under *Australia's Oceans Policy* (AOP), with a specific focus on the South-East Regional Marine Plan (SERMP). Two key issues were identified. The first was operationalising the concept of integration with respect to fisheries and oceans management. The concept of integration is potentially nebulous. This thesis distinguishes between, and separates, cross-jurisdictional, cross-sectoral and intra-sectoral integration. The second issue was the importance of advanced conflict management techniques in the implementation of integrated management. Conflict is viewed as an indicator of a healthy and 'democratic' system of decision-making that can bring positive change if well managed. This thesis explores alternative approaches used in conflict management and identifies means to transform inherent conflicts in fisheries and oceans management from negative into positive action.

8.2 Integration in Australia's oceans management

This thesis argues that the delineation of Commonwealth and state jurisdiction in Australia, coupled with a traditionally sector-based management system, suggests that Australia is unlikely to achieve integration at the higher levels of the Policy Integration Scale (PIS). AOP and regional marine planning have arguably raised the cross-sectoral integration capacity of the Commonwealth, with respect to oceans management, as high as it will go (approximately Level 5 on the PIS). Enhanced integration beyond this will require a restructuring of the federal governance system away from traditional sectoral-based management towards a more ecosystem-based framework. The Integrated Oceans Management (IOM) initiative is also increasing the capacity for cross-jurisdictional integration, but will be unlikely to achieve any high levels of integration under the current federal system (currently around a Level 3 on the PIS). It is unlikely that states/territories would ever concede to change the Australian Constitution, therefore the cross-jurisdictional capacity of Australia's oceans will always be constrained to Offshore Constitutional Settlement (OCS) style arrangements and nationally agreed guidelines. Integration in oceans management occurs at high level policy planning and development. There has been minimal reference to the practical implementation issues in the SERMP to ensure that the objectives of AOP and broader IOM will be met through ongoing management measures. This thesis proposes some practical implementation approaches to ecosystem-based management (see Section 8.5 for a summary of these proposals).

8.3 Australia's fisheries management

Australian fisheries are increasingly moving from input to output control systems. For instance, the granting of Statutory Fishing Rights and quota-based management are coming into force in the SESS Fishery in 2005. This will enable market-based control of the integrated fishery, with a greater onus on the fisher to maintain the integrity of the ecosystem and its functioning. This thesis argues that, based on international experience with this type of system, market-based approaches are only effective in the long-term if coupled with other societal-based approaches. It is therefore recommended that in implementing market-based approaches, Australia also maintains its fisheries co-management system, to meet the social and environmental aspirations of Australia's fisheries management.

Intra-sectoral fisheries integration is needed to adequately meet the ecosystem-based management objectives of AOP. As such, resource sharing allocation between fisheries resource users, such as recreational, commercial and indigenous users, is coming to the forefront of fisheries policy making in Australia. The lack of practical application of this commitment in the SERMP, however, seriously affects the sector's capacity to meet the integration objectives of AOP. There is an increasing need for fisheries to build capacity from within to integrate management with other sectors, such as conservation and petroleum, to meet the demands of ecosystem-based management. There is no easy solution to resource sharing and conflicts are manifest in some fisheries. This thesis proposes some ways to advance ecosystem-based management with respect to Australia's fisheries and the integrative objectives of the SERMP (see Section 8.5 for a summary of these proposals).

8.4 International experience and other natural resource management models

The arguments of this thesis are based on an examination of international approaches and other natural resource management models, from both within Australia and abroad. Examination of international developments in fisheries and oceans policy reveals Australia's foresight in proactive oceans planning and management and leadership with respect to fisheries co-management. This foresight, however, brings with it many pressures and uncertainties. There are a number of examples from other countries that provide opportunities for analysis and 'lesson drawing'. The most relevant example may be that of Canada, which has a similar governance structure (despite fundamentally different constitutional division of powers over fisheries and oceans) and has also embarked on a national approach to oceans planning and management. The failure of USA Regional Fisheries Management Councils to meet their cross-sectoral objectives offers other (perhaps

even negative) insights into approaches to cross-sectoral fisheries management.⁹⁶² New Zealand has developed resource-sharing arrangements in fisheries, particularly addressing indigenous interests, and privatisation issues, from which Australia can learn.⁹⁶³ The European Union is in the process of establishing Regional Advisory Councils for its fisheries resources, which will potentially offer insights into the efficiency of Australian fisheries Management Advisory Committees (MACs).⁹⁶⁴ Iceland offers insights into the long-term social issues arising from a predominantly market-based fisheries management system.⁹⁶⁵

Natural resource management models demonstrate the complexities of managing industry development whilst maintaining ecosystem integrity. This analysis introduces some of the challenges to be expected by fisheries in the implementation of the SERMP. Participative processes are highlighted as a key to successful natural resource management, yet most models highlight the importance of retaining central control. While the devolution of power has been extensively discussed in the literature, practical implementation of such arrangements is limited. This is due in part to the reluctance of central authorities to relinquish any power, or financial commitments, that they have been vested with on behalf of the general public.

8.5 The Toolbox

This thesis draws on the research and proposes some tools and approaches for integration and conflict management in the implementation of fisheries within regional marine planning. These tools are not presented as definitive answers, but rather, as academic contemplation on a pressing issue of national significance. These approaches have been separated into instrumental and institutional tools, recognising that neither one alone will bring about effective change and a judicious combination is required to achieve the intended outcomes.

⁹⁶² Okey, T.A. (2003). "Membership of the eight Regional Fishery Management Councils in the United States: are special interests over-represented?" *Marine Policy*, 27: 193-206.

⁹⁶³ Annala, J.H. (1996). "New Zealand's ITQ system: have the first eight years been a success or a failure?" *Reviews in Fish Biology and Fisheries*, 6: 43-62; and Batstone, C.J. and Sharp, B.M.H. (1999). "New Zealand's quota management system." *Marine Policy*, 23 (2): 177-190.

⁹⁶⁴ Commission of the European Communities. (2003). "Proposal for a Council decision establishing Regional Advisory Councils under the Common Fisheries Policy." Brussels: COM(2003) 697 final. 2003/0238 (CNS).

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Some approaches proposed for general policy integration and improved conflict management are:

- a Clearing House for Marine Policy and Legislation;
- an Ecologically Sustainable Development Auditor; or
- mediation training as a matter of process in government to minimise conflict.

Some instrumental Integrated Oceans Management tools proposed include:

- a National Integrated Oceans Management Policy;
- spatial management through Conservation Zoning;
- an Integrated Oceans Management Act; or
- semi-privatisation of the Marine Protected Areas process to minimise conflict.

Some instrumental Fisheries Management tools proposed include:

- regional OCS arrangements;
- overarching intra-sectoral (recreational, commercial, indigenous and aquaculture) fisheries management plans;
- full ESD reporting for Australian fisheries (including social, cultural and economic aspects);
- Management Strategy Evaluation as a conflict management tool;
- implementation of a Fisheries Observer Policy;
- development of a Conflict Management Toolbox interactive website.

To facilitate the implementation of these proposed instrumental tools and for the effective implementation of current policies and programs, the following institutional tools are proposed:

- an Integrated Oceans Management Inquiry carried out by a body modelled on the former Resource Assessment Commission;
- some alternative ongoing roles for the National Oceans Office to either replace their current role or enhance aspects of it (including: a clearing house for oceans policy/legislation; an independent assessment board under planning legislation; regional outreach; secretariat to ministerial councils; or a mediator for multiple-use management);
- an Integrated Oceans Management Ministerial Council (IOMMC) incorporating the NOMB and relevant state ministers as the decision-makers;
- a Department of the Oceans;
- Integrated Oceans Management Advisory Councils (IOMACs) incorporating cross-sectoral and cross-jurisdictional interests for regional oceans management;

- Regional Fisheries Advisory Councils (RFACs) incorporating intra-sectoral interests and a National Fisheries Allocation Board (NFAB);
- Regional Fisheries Management Forums (RFMFs) building on the Australian Fisheries Management Forum concept;
- establishing a Fisheries Interdepartmental Committee (IDC) to ensure duplication is minimised within Government;
- implementing the legislated Fishing Industry Policy Council; or
- some minor MAC reforms in line with the SERMP and the concept of representative versus expertise-based membership.

8.5 Conclusion

The material presented in this thesis emphasises that more 'positive' cooperative approaches to integrated oceans management and fisheries management are required to meet the increasing demands of ecosystem-based management. This means a shift away from the 'negative' hierarchical models, to a proactive consensual approach to management. If managed well and implemented with a judicious combination of instruments and institutional arrangements, sectoral management has the potential to effectively meet the ecosystem-based objectives of AOP and regional marine planning. This thesis also concludes that sectors, such as fisheries that are impacted by regional marine planning, need to build capacity from within to integrate cross-jurisdictionally, cross-sectorally and intra-sectorally to meet the ecosystem-based objectives of AOP.

AOP and regional marine planning also provide an opportunity to address traditional sectoral conflicts through participatory processes for the effective management of *healthy oceans: cared for, understood and used wisely for the benefit of all, now and in the future*. The participatory approach is inclusive of definitive and expectant stakeholders in the development of policy and planning processes, and of information exchange with latent stakeholders. At present, there are no proposals for ongoing stakeholder participation in management and review processes once RMPs are implemented, nor for any formal conflict management process between interest groups. Fisheries management mechanisms contain similar participatory processes, but are generally limited to an advisory role and/or incorporate 'meeting-friendly' stakeholders, who may not be representative. Conflict management processes provide an effective means of addressing integration when institutional and instrumental integration are constrained by sectoral or jurisdictional interests, or philosophical differences. This thesis concludes that conflict management approaches need to be made more accessible to all stakeholders through regional marine planning and fisheries management processes.

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APPENDIX ONE: PERMISSION FORMS

The following signed forms grant Liz Foster permission to use the information published in consultancy reports and co-authored papers that she has written or contributed to, in the content and background of this thesis.

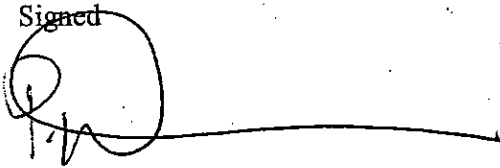
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This statement is to confirm permission from the National Oceans Office, for the use of the content and research of the following report, in the content of the PhD Thesis being carried out by the author:

Foster, E. (unpublished). "Evaluation of Alternative Models."
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This statement also confirms that the research and a majority of the content/analysis of this report (80%) was developed by the author – with changes culminating from editing by National Oceans Office staff and peer review/validation by experts and practitioners in the field of natural resource management.

Signed



Phoebe Wood-Ingram
Project Manager
National Oceans Office

Date:

19.7.04



Elizabeth Foster
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Date:

22.7.04

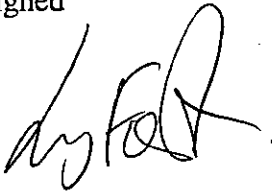
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This statement is to confirm the proportionate authorship of the co-authored paper:

Foster, E.G. and Haward, M. (2003). "Integrated Management Councils. A Conceptual Model for Ocean Policy Conflict Management in Australia." *Ocean & Coastal Management*, 46: 547-563.


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Liz Foster

Date: 28.8.04



Marcus Haward

Date: 28.8.04

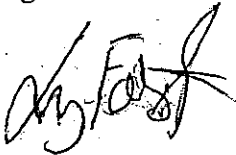
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Foster, E.G., Haward, M. and Coffen-Smout, S. "Implementing integrated oceans management: Australia's South East Regional Marine Plan (SERMP) Process and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) Initiative." Marine Policy: *in press*.

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Marcus Haward

Date: 22.7.04



Scott Coffen-Smout

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