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Guidelines for Protected Areas Legislation

Barbara Lausche

Author

Françoise Burhenne

Project Director



IUCN Environmental Policy and Law Paper No. 81



Guidelines for Protected Areas Legislation

Guidelines for Protected Areas Legislation

Barbara Lausche
Author

Françoise Burhenne
Project Director



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Contents

Foreword	xv
Preface and acknowledgements	xvii
Acronyms and abbreviations	xxv
Introduction to the guidelines	1
A The setting	1
B Purpose and audience	3
C Scope	4
D Sources of information and guidance	5
E Generic terms	7
F Organization	8
G Looking ahead	9
Part I: Basic principles and obligations	11
Introduction	11
1 Protected areas defined	11
1.1 IUCN definition	11
1.2 Guiding principles	14
1.3 Special applications	14
1.4 Protected areas and sustainable development	16
2 Perpetual integrity	17
3 Management principles with legal application	19
3.1 System planning	19
3.1.1 Protected areas system plan	21
3.1.2 Ecosystem approach	22
3.1.3 Buffer zones and connectivity conservation	23
3.2 Management by conservation objectives	25
3.2.1 Protected area management categories	25
3.3 Management plans	29
3.3.1 Key management plan elements for legislation	30
3.3.2 Adaptive management	32
3.4 Precautionary approach	33
3.5 Managing for invasive alien species	34
3.6 Managing for climate change	37
3.7 Taking an international perspective	39
4 Governance principles in decision making	40
4.1 Good governance	40
4.2 Aarhus Convention	43
4.3 Access to information	44
4.4 Public participation	45
4.5 Social equity and justice	46

5	Multilateral and supranational legal obligations	47
5.1	Major global conventions	48
5.1.1	Convention on Biological Diversity	48
5.1.2	Convention Concerning the Protection of the World Cultural and Natural Heritage	50
5.1.3	Convention on Wetlands of International Importance especially as Waterfowl Habitat	54
5.1.4	Convention on the Conservation of Migratory Species of Wild Animals	56
5.2	Regional instruments	60
5.2.1	Africa: African Convention on the Conservation of Nature and Natural Resources (revised)	60
5.2.2	Europe: Convention on the Conservation of European Wildlife and Natural Habitats	61
5.2.3	The Americas: Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere	63
5.3	European Union: Habitats and Birds Directives (Natura 2000 Network)	64
6	UNESCO Man and the Biosphere Programme	65
7	International policy and guidance	67
7.1	Stockholm Declaration and Principles	68
7.2	World Charter for Nature	68
7.3	World Commission on Environment and Development	69
7.4	United Nations Conference on Environment and Development: Rio Declaration and Agenda 21	70
7.5	Earth Charter	70
7.6	World Summit on Sustainable Development	71
7.7	Sustainable forest management	72
7.8	Sustainable fisheries management	73
	Part II: Governance approaches	75
	Introduction	75
1	Context	75
2	New policy directions	77
3	Governance approaches	77
3.1	Governance by government	79
3.2	Voluntarily conserved areas: new governance approaches	80
3.2.1	Governance by indigenous and local communities	81
3.2.2	Private governance	85
3.3	Co-managed or shared governance	89
3.4	Governance as a continuum of options	90
3.5	Flexibility with new governance approaches	92
4	Supportive international law and policy	92
4.1	Convention on Biological Diversity	93
4.2	World Heritage Operational Guidelines	93
4.3	Ramsar Guidelines	93
4.4	International Labour Organization Convention 169	94
4.5	United Nations Declaration on the Rights of Indigenous Peoples	95

5	Special legal considerations for new governance approaches	95
5.1	Protected area management categories	95
5.2	Good governance principles	96
5.3	Tenure and governance	99
5.4	Agreements with the government	100
6	Other legal tools supporting voluntary conservation	102
6.1	Easements and covenants attached to the land	102
6.2	Land trusts	103
Part III, Chapter 1: Generic elements of protected areas legislation		107
Introduction		107
1	Pre-drafting preparations	107
2	Preliminary sections of the legislation	111
2.1	Definitions and interpretation	111
2.1.1	General rules	111
2.1.2	International definitions	112
2.2	Application of the law	114
3	Policy and objectives	116
3.1	Supportive national policy	116
3.2	Constitutional principles	116
3.3	Overall objectives	119
3.4	Principles associated with objectives	123
4	Institutional arrangements	124
4.1	General considerations	124
4.2	Nature of authority	125
4.2.1	High policy level	125
4.2.2	Lead protected areas agency	127
4.2.3	Statutory corporations	128
4.2.4	Management authorities for individual sites	129
4.2.5	Functions, duties and powers	130
4.3	Co-management	132
4.4	Advisory bodies	134
4.5	Coordination mechanisms	135
4.6	Special considerations for voluntarily conserved areas	137
5	Planning for protected areas	138
5.1	System plans	138
5.2	Legal status of land or sea	140
5.3	Compatibility with surrounding landscape or seascape	142
5.4	Supportive land use regulation	144
6	Establishment of protected areas	146
6.1	Use of protected area categories	147
6.2	Powers of establishment and recognition	149
6.3	Nomination process for inclusion of new protected areas	150
6.4	Powers and procedures for reduction or declassification	152
6.5	Demarcation of boundaries and zones	154
6.6	Interim protection	156
6.7	Compensation	157

6.8	Special considerations for biosphere reserves	159
6.9	General considerations for voluntarily conserved areas	160
7	Protected areas management	162
7.1	Site management plans	163
7.2	Zoning within a protected area	167
7.3	Buffer zones and connectivity conservation areas	167
7.4	Special considerations for voluntarily conserved areas	170
8	Conservation agreements	172
9	Regulated activities	174
9.1	General principles	175
9.2	Prohibited activities	177
9.3	Activities requiring written permission	178
9.4	Activities allowed by general rules without written permission	180
9.5	Regulating category V and VI areas	182
9.6	Recreational activities	184
9.7	Emergency and incident management	185
10	Compliance and enforcement	186
10.1	Achieving compliance	186
10.2	Authorized officers	188
10.3	Powers and duties of authorized officers	190
10.3.1	Police powers	191
10.3.2	Other powers	191
10.3.3	Combining extension with enforcement	192
10.4	Offences and penalties	193
10.4.1	Criminal penalties	193
10.4.2	Civil penalties	195
10.4.3	Burden of proof	197
10.4.4	Legal proceedings	200
10.4.5	Administrative appeals	201
11	Environmental and social impact assessment	201
12	Special financial tools	203
13	Miscellaneous	206
13.1	Enabling provisions	206
13.2	Transitional provisions, repeal and revision	207
14	Schedules	207
Part III, Chapter 2: Special issues for marine protected areas		209
Introduction		209
1	Historical perspective	210
2	Marine features requiring special attention	211
2.1	Special characteristics	212
2.2	Special threats	218
2.3	Special management challenges	219
3	MPA-specific international obligations and principles	222
3.1	International oceans law	223
3.1.1	United National Convention on the Law of the Sea	223
3.1.2	International Maritime Organization rules and conventions	228

3.2	International conservation treaties	231
3.2.1	Convention on Biological Diversity	231
3.2.2	Ramsar Convention	233
3.2.3	World Heritage Convention Marine Programme	234
3.3	Regional agreements	235
3.3.1	Regional Seas	235
3.3.2	OSPAR Convention	239
3.3.3	Helsinki Convention and OSPAR Convention	240
3.3.4	ACCOBAMS	241
3.3.5	Natura 2000	241
4	Incorporating marine principles in legislation	242
4.1	Legal drafting preparations	242
4.2	Preliminaries	244
4.2.1	Marine and oceans policy	244
4.2.2	Definitions	245
4.3	Objectives of MPA networks and sites	247
4.4	Strategic planning for the MPA network	249
4.5	Institutional arrangements	250
4.6	Establishment	253
4.7	Management	257
4.8	Regulating activities	259
4.9	Compliance and enforcement	262
4.10	Special financial considerations	263
4.11	Harmonization of laws	264
	Part IV: Transboundary protected areas	265
	Introduction	265
1	Growth of TBPAs	266
2	Approaches to TBPAs	267
2.1	IUCN definition	267
2.2	Typology for TBPAs	268
2.3	Global TBPA network	269
2.4	Global and continental connectivity	270
3	Key management principles of legal relevance	270
4	Supportive international law and policy	271
4.1	Convention on Biological Diversity	272
4.2	Convention on Wetlands of International Importance especially as Waterfowl Habitat	272
4.3	World heritage sites	274
4.4	Convention on the Conservation of Migratory Species of Wild Animals	276
4.5	United Nations Convention on the Law of the Sea	276
4.6	European ecological networks on a continental scale	276
4.7	UNESCO Man and the Biosphere Programme	279
5	Special legal considerations for TBPAs	280
5.1	Domestic enabling framework	281
5.2	Drafting preparations for TBPA agreements	281
5.3	Objectives of TBPA cooperation	282

5.4	Levels and types of TBPA cooperation	283
5.5	Options for TBPA institutional mechanisms	288
5.6	TBPA-related coordination functions	289
6	Harmonization of actions	292

Boxes, tables and figures

Box Intro-1:	Worldwide coverage of protected areas	2
Box I-1:	Main characteristics of a protected areas system	21
Box I-2:	Use of the IUCN protected area management categories in law and policy	28
Box I-3:	Invasive alien species and protected areas	35
Box I-4:	Definitions of governance used by international organizations	41
Box I-5:	In-situ conservation—key CBD provisions for protected areas legislation	49
Box I-6:	Law-related emphasis of CBD Programme of Work on Protected Areas	50
Box II-1:	Community conserved areas in South America	82
Box II-2:	Protected areas and mobile peoples	83
Box II-3:	Category V and VI—distinguishing features for legal consideration	97
Box II-4:	Land Trust Alliance—standards for the operation of a land trust	104
Box III(1)-1:	Constitutional provisions on protected areas and conservation	117
Box III(1)-2:	Constitutional provisions on indigenous peoples’ rights to traditional lands	118
Box III(1)-3:	Objectives and principles in Australian legislation	122
Box III(1)-4:	Key ministerial-level powers and duties	126
Box III(1)-5:	Powers and duties of protected area authorities	131
Box III(1)-6:	Intra-governmental conflict resolution procedures in South Africa	137
Box III(1)-7:	Property rights and interests, and legal tools available for conservation	141
Box III(1)-8:	General protection of special habitat types or zones in Denmark	143
Box III(1)-9:	French land use planning and nature protection	145
Box III(1)-10:	IUCN guidance on assigning a protected area category	149
Box III(1)-11:	Honorary enforcement officers recognized in Fiji legislation	190
Box III(1)-12:	Third-party enforcement provisions in Australia	198
Box III(1)-13:	Corporate liability in New South Wales, Australia	199
Box III(1)-14:	Australia’s National Parks Fund	204
Box III(2)-1:	Recognizing ecosystem linkages between marine areas within national jurisdiction and the high seas	213
Box III(2)-2:	South Africa’s first offshore MPA	214
Box III(2)-3:	New Zealand’s MPAs—coastal versus deepwater zones	215
Box III(2)-4:	Great Australian Bight Marine Park: federal–state cooperation	216
Box III(2)-5:	Locally managed marine areas in the South Pacific	217
Box III(2)-6:	CBD Programme of Work on Marine and Coastal Biodiversity—MPAs and national legislation	231
Box III(2)-7:	Convention on the Protection of the Underwater Cultural Heritage	234
Box III(2)-8:	The Mediterranean Pelagos Sanctuary—a high seas transboundary MPA	237
Box III(2)-9:	OSPAR and transnational MPA networks	240
Box III(2)-10:	Planning an MPA network—‘Islands in the Stream’ in the Gulf of Mexico	260
Box III(2)-11:	South Africa’s Marine Living Resources Fund	264
Box IV-1:	Growth in TBPAs in Central America	266
Box IV-2:	Examples of the IUCN typology of TBPAs	268
Box IV-3:	The Wadden Sea TBPA—trilateral cooperation	275
Box IV-4:	Trilateral MOU for the Sulu-Sulawesi Marine Ecoregion	286

Table I-1: Explanation of terms used in the IUCN-WCPA 2008 definition of protected areas	13
Table I-2: IUCN protected area categories	27
Table I-3: Major governance principles recognized by international organizations	42
Table I-4: Agreements under the Convention on Migratory Species	57
Table I-5: Memoranda of understanding under the Convention on Migratory Species	58
Table II-1: IUCN typology of protected area governance types	78
Table II-2: Options for nature protection on private lands that support formal protected area systems	88
Table II-3: IUCN categories applied to voluntary conservation initiatives	96
Table II-4: Selected co-management and sole management arrangements in Australia	100
Table III(1)-1: IUCN protected area categories	147
Table III(1)-2: Legal approaches to connectivity conservation	169
Table III(2)-1: Some of the world's largest MPAs	212
Table III(2)-2: Special areas under MARPOL	230
Table III(2)-3: CBD guidance on marine and coastal protected areas and networks	232
Table IV-1: Collaborative international management of adjacent Ramsar sites—transboundary Ramsar sites	273
Table IV-2: UNESCO List of Transboundary Biosphere Reserves	280
Table IV-3: Levels of cooperation on TBPA	284
Box Intro-1, Figure A: Growth in nationally designated protected areas	2
Figure II-1: Continuum of possible collaborations	90
Figure II-2: Options for governing individual protected areas	91
Figure III(2)-1: Maritime zones	224
Box III(2)-8, Figure A: The Pelagos Sanctuary	238
Box III(2)-10, Figure B: A map of the Gulf of Mexico	260
Box IV-4, Figure A: Location and Global International Waters Assessment (GIWA) boundaries of the Sulu-Sulawesi (Celebes) Sea and adjacent GIWA subregions	287
References	293
Legal instruments	300
Resolutions, recommendations and COP decisions	306
Websites	308
Thematic bibliography	310
A. General and cross-cutting	310
B. Governance	314
C. Marine protected areas	318
D. Transboundary protected areas	322
Index	323

CD-ROM (See inside back cover)

Guidelines for Protected Areas Legislation

Introduction to the Guidelines

Part I: Basic principles and obligations

Part II: Governance approaches

Part III, Chapter 1: Generic elements of protected areas legislation

Part III, Chapter 2: Special issues for marine protected areas

Part IV: Transboundary protected areas

Case studies

National and sub-national protected areas frameworks

Legal Framework for Protected Areas: Australia

Ben Boer & Stefan Gruber

Legal Framework for Protected Areas: New South Wales (Australia)

Ben Boer & Stefan Gruber

Legal Framework for Protected Areas: Canada

Jamie Benidickson

Legal Framework for Protected Areas: Ontario (Canada)

Jamie Benidickson

Legal Framework for Protected Areas : France

Armelle Guignier & Michel Prieur

Original French version:

Le cadre juridique des aires protégées : France

Armelle Guignier & Michel Prieur

Legal Framework for Protected Areas: Peru

Pedro Solano

Original Spanish version:

Marcos Regulatorios Nacionales de Áreas Protegidas: Perú

Pedro Solano

Legal Framework for Protected Areas: Philippines

Antonio G.M. La Viña & James L. Kho & Mary Jean Caleda

Legal Framework for Protected Areas: South Africa

Alexander Ross Paterson

Special protected area types

Community Conserved Areas: Legal Framework for the Natural Park of the Ampezzo Dolomites (Italy)

Stefano Lorenzi & Grazia Borrini-Feyerabend

Indigenous and Community Conserved Areas: The Legal Framework in India

Neema Pathak & Ashish Kothari

Indigenous – Government Co-Management of Protected Areas: Booderee National Park and the National Framework in Australia

David Farrier & Michael Adams

Marine Protected Areas: Legal Framework for the Gully off the Coast of Nova Scotia (Canada)

Paul Macnab & David L. VanderZwaag

Private Protected Areas: Legal Framework for Pumalin Park (Chile)

Lorenzo Soto Oyarzún

Original Spanish version:

Áreas Protegidas Privadas: Marco legal para el Parque Pumalín (Chile)

Lorenzo Soto Oyarzún

Transboundary Protected Areas: Legal Framework for the W Transboundary Biosphere Reserve (Benin, Burkina Faso, Niger)

Agnès Michelot & Boubacar Ouedraogo

Original French version:

Aires Protégées transfrontalières: le cadre juridique de la réserve de biosphère transfrontalière du W (Bénin, Burkina Faso, Niger)

Agnès Michelot & Boubacar Ouedraogo

Ecological Corridors: Legal Framework for the Baekdu Daegan Mountain System (South Korea)

Katie Miller & Kim Hyun

Protected area laws: matrices

Australia (federal)

Australia (New South Wales)

Australia (the Great Barrier Reef)

Canada (federal)

Canada (Ontario)

France

Peru

Philippines

South Africa

Foreword

Over the past few decades the global extent, distribution and quality of management of protected areas has expanded despite the ongoing loss of global biodiversity. At the same time, the use of protected areas as a valid and effective tool for conservation has markedly improved in both policy and practice worldwide. As recently as October 2010, Parties to the Convention on Biological Diversity agreed to new and more challenging targets for protected area coverage. Furthermore, increasing emphasis has been placed on the quality of management, governance and sustainable financing. New and increased threats to biodiversity have led to new and increased interest in protected areas and their role in mitigating and facilitating adaptation to these threats. While these developments have resulted in a substantial body of guidance regarding the management of protected areas, there remains a need to correlate best management practice with the law that governs protected areas and the legal framework within which such areas are established and managed. The purpose of these *Guidelines for Protected Areas Legislation* is to remedy this situation and to support national governments in instituting appropriate legislation to meet these challenges and opportunities.

In 1980, the IUCN Environmental Law Centre published IUCN's first guidelines on protected areas legislation. Since then, ecosystems have faced growing threats from factors such as habitat loss, invasive alien species and extractive activities as well as climate change, among many others. During this time, it has also been recognized globally that protected areas play a critical role in securing ecosystems and their economic and social value, and that international agreements and national law in turn play a critical role in securing protected areas.

These guidelines are the result of a joint effort, led by the IUCN Environmental Law Centre, to update and expand the 1980 guidelines with practical state-of-the-art guidance for those interested in strengthening protected areas legislation, including legal drafters, protected areas professionals, policy makers, governmental and non-governmental stakeholders, and members of the academic community.

Over the course of more than three years, experts from IUCN's Commission on Environmental Law, World Commission on Protected Areas, Commission on Environmental, Economic and Social Policy, and Global Programme on Protected Areas have collaborated with the IUCN Environmental Law Centre to produce what we believe is a tool to help all those working on protected areas legislation to ensure that all aspects of protected areas, including ongoing, new and emerging issues, are appropriately addressed in law.

Emerging issues, in particular, require special consideration in protected areas legal frameworks:

- Coastal and marine protected areas need to be integrated into land use and marine spatial planning, and more attention must be given to deepwater marine protected areas within national jurisdictions.
- New types of governance for protected areas, such as private protected areas, and indigenous and community conserved areas, require new approaches that need to be enabled by law.
- Transboundary protected areas offer opportunities for inter-state cooperation that involve national law as well as international agreements.
- Climate change demands flexibility in the design of protected area legal frameworks to accommodate both adaptation and mitigation, including by creating corridors that ensure connectivity within and among ecosystems.
- Protected area systems require sustainable financing, which involves an array of innovative instruments and mechanisms implemented by institutions that are often not responsible for protected areas.

The *Guidelines for Protected Areas Legislation* discuss these emerging issues as well as many others, illustrated with the help of 15 case studies that examine national protected areas legislation and specific types of protected areas.

The methodology used to produce these guidelines, discussed further in the Preface, was geared towards obtaining as much multidisciplinary participation, practitioner involvement and expert input as possible.

IUCN is grateful to all those who have participated in this important project. We would like to single out the role of the author, Barbara Lausche, and Françoise Burhenne, Project Director at the IUCN Environmental Law Centre, who have worked on this project far beyond the call of duty to ensure the quality not only of the end product but also of its process of development. Finally, IUCN is deeply indebted to the Aage V. Jensen Charity Foundation, without whose support this work could not have been accomplished.

The need for collaboration between lawyers and protected area professionals will increase in the years ahead. IUCN offers these guidelines in support of this essential cooperation, along with a commitment to continue facilitating such efforts.

Sheila Abed

Chair, Commission on Environmental Law

Alejandro Iza

*Head, Environmental Law Programme
Director, Environmental Law Centre*

Nik Lopoukhine

Chair, World Commission on Protected Areas

Trevor Sandwith

Head, Global Protected Areas Programme

Preface and acknowledgements

The *Guidelines for Protected Areas Legislation* are the result of a process of collaboration that began in mid-2007. The work, which spanned more than three years, involved formal and informal consultations, two expert workshops, and numerous reviews of successive drafts by practitioners and experts from all over the world. The purpose of this Preface is to acknowledge and thank the many individuals who contributed their time and expertise in various ways to make this project a success. It should be noted that these participants offered their assistance in a personal capacity. The names of some organizations and the titles of some individuals may have changed since their participation.

Our thanks go first to the IUCN Commission on Environmental Law (CEL) and the IUCN World Commission on Protected Areas (WCPA), in particular their joint Task Force on Protected Areas Law and Policy, for their continued support and collaboration. We also extend our thanks to the Theme on Indigenous Peoples, Local Communities, Equity and Protected Areas (TILCEPA), a joint initiative of IUCN-WCPA and the IUCN Commission on Environmental, Economic and Social Policy (CEESP), for its extensive help on governance issues. While the IUCN Environmental Law Centre (ELC) led, managed and coordinated the project, this support and collaboration made it possible to mobilize a large number of experts worldwide and tap the many experiences and perspectives emerging about protected areas law in the 21st century.

The first IUCN guidelines on protected areas law, authored by Barbara Lausche and published in 1980, were considered very useful at the time. The current project, supported by the Aage V. Jensen Charity Foundation, enabled the ELC to examine how protected areas legislation has grown and evolved since then with new elements and approaches in response to many influences, especially international law developments, best practice management principles, growing experiences at the national level, and improved science and technology related to biodiversity conservation. The project also made it possible to produce 15 case studies from various regions of the world, covering general protected areas legislation as well as special protected area types. Last but not least, it became possible to produce the guidelines in the three official IUCN languages.

The first task was to form an expert steering group with overall responsibility for advising and providing guidance on the process and products. Membership of the steering group involved a major commitment of time and effort including participating in four steering group meetings, reviewing all successive drafts, recommending reviewers, and identifying additional reference materials and case studies to illustrate key points. The project is deeply indebted to its steering group members:

- Ben Boer, Professor Emeritus, Australian Centre for Climate and Environmental Law, Faculty of Law, University of Sydney, Australia; CEL/WCPA member; co-chair, CEL/WCPA Joint Task Force on Protected Areas Law and Policy
- Françoise Burhenne-Guilmin, Senior Counsel, IUCN-ELC; Project Director
- Alejandro Iza, Head, IUCN Environmental Law Programme (ELP); Director, IUCN-ELC
- Melinda Janki, environmental lawyer, Guyana; CEL/WCPA/CEESP member; co-chair, CEL/WCPA Joint Task Force on Protected Areas Law and Policy
- Veit Koester, international environmental lawyer, Denmark; CEL member
- Ali Mohammed Mekouar, Director, Conference, Council and Protocol Affairs Division, Food and Agriculture Organization of the United Nations (FAO), Italy; CEL member
- Patti Moore, Head, IUCN Regional Environmental Law Programme Asia (RELPA), Thailand

- Pedro Rosabal Gonzáles, Acting Head, IUCN Programme on Protected Areas (PPA) (2009–10)
- David Sheppard, Head, IUCN-PPA until 2009.

The steering group held its first meeting in November 2007 to provide input on an annotated outline for the guidelines and to lay out the general schedule for various project outputs. Thereafter work began on the first draft, key elements of which were presented at an IUCN-ELC ‘side event’ on protected areas and the law at the 9th Conference of the Parties to the Convention on Biological Diversity (CBD COP 9) in May 2008. Special thanks go to four panellists who joined Barbara Lausche and Françoise Burhenne-Guilmin at this event: Patti Moore and Melinda Janki who made presentations, and Nik Lopoukhine, Chair, WCPA, and David Sheppard, Head, IUCN-PPA, who offered comments and guided the discussion.

In June 2008, the project convened its first expert workshop in Ottawa, Canada, to provide comments on the first working draft of the guidelines, and to identify possible case studies and reviewers. This workshop was a joint meeting of the project steering group and the WCPA/CEL Task Force on Protected Areas Law and Policy. The meeting was preceded by a two-day international workshop on Protected Areas Law and Policy, convened by the University of Ottawa, IUCN-ELP, IUCN-WCPA and the IUCN Academy of Environmental Law, where the draft guidelines were discussed by participants. Immediately following the expert workshop, the project steering group held its second meeting.

These meetings generated valuable comments on the first working draft of the guidelines as well as suggestions for case studies for the project. The following participants of the expert workshop deserve special thanks:

- Bruce Amos, Former Director General, Parks Canada; WCPA member
- Jamie Benidickson, Professor, Faculty of Law, University of Ottawa, Canada; CEL member
- Edgar Buhanga, Uganda Wildlife Authority; WCPA member
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- Pedro Solano, Director, Conservation Programme of the Peruvian Society for Environmental Law, Peru; CEL member
- Laode Syarif, Faculty of Law, Hasanuddin University, Indonesia.

Following this workshop, the author began to incorporate comments and undertake additional research and structuring of the guidelines, as agreed at the steering group meeting. Simultaneously, ELC made arrangements with authors to prepare the case studies. An outline for the national framework studies was developed, along with a matrix of questions related to the content and effectiveness of legal provisions, in order to generate information that could be used for comparative analysis. Special appreciation is extended to Patti Moore for helping manage this component of the project, and to all the case study authors.

The authors of the national protected areas framework case studies are:

- Australia (federal) and New South Wales: Ben Boer, Professor Emeritus, Australian Centre for Climate and Environmental Law, Faculty of Law, University of Sydney, Australia; CEL/WCPA member; co-chair, CEL/WCPA Joint Task Force on Protected Areas Law and Policy; and Stefan Gruber, PhD Candidate, Australian Centre for Climate and Environmental Law, Faculty of Law, University of Sydney; legal practitioner, Chamber of Lawyers Frankfurt am Main, Germany
- Canada (federal) and Ontario: Jamie Benidickson, Professor, Faculty of Law, University of Ottawa, Canada; CEL member
- France: Armelle Guignier, Researcher, Centre for Water Law, Policy and Science, University of Dundee, Scotland; former Chargée-de-mission, CRIDEAU-OMIJ, University of Limoges, France; CEL member; and Michel Prieur, Professor Emeritus, Limoges University, France; Scientific Director, CRIDEAU-OMIJ; CEL member
- Peru: Pedro Solano, Director, Conservation Programme of the Peruvian Society for Environmental Law, Peru; CEL member
- the Philippines: Antonio G.M. La Viña, Dean, Ateneo School of Government, Philippines; former Undersecretary, Department of Environment and Natural Resources (DENR); CEL member; James L. Kho, environmental lawyer; Senior Associate, Ateneo School of Government, Philippines; and Mary Jean Caleda, Assistant Dean, Ateneo School of Government, Philippines; former Division Chief, DENR Protected Areas and Wildlife Bureau (PAWB)
- South Africa: Alexander Ross Paterson, Associate Professor, Public Law Department, Institute of Marine and Environmental Law, University of Cape Town, South Africa; CEL member.

The authors of the case studies on special protected area types are:

- Community conserved areas (Natural Park of the Ampezzo Dolomites, Italy): Stefano Lorenzi, Secretary, Regole of the Ampezzo Valley; and Grazia Borrini-Feyerabend, Vice-Chair for Europe, CEESP
- Indigenous and community conserved areas (India): Neema Pathak, member, Kalpavriksh, India; Coordinator, Conservation and Livelihoods Programme; and Ashish Kothari, founder and member, Kalpavriksh, India; former co-chair, IUCN-TILCEPA; WCPA member
- Indigenous–government co-management (Booderee National Park, Australia): David Farrier, Professor of Law, Institute for Conservation Biology and Environmental Management, University of Wollongong, Australia; CEL member; and Michael Adams, Senior Lecturer, Institute for Conservation Biology and Law, University of Wollongong, Australia
- Marine protected areas (the Gully off the Coast of Nova Scotia, Canada): David L. VanderZwaag, Canada Research Chair (Tier 1) in Ocean Law and Governance, Marine & Environmental Law Institute, Dalhousie University, Canada; co-chair, CEL Oceans Specialist Group; and Paul Macnab, Gully Marine Protected Area Manager, Fisheries and Oceans Canada
- Private protected areas (Pumalin Park, Chile): Lorenzo Soto Oyarzún, Director, Sociedad Chilena de Derecho Ambiental (Environmental Law Society), Chile; CEL member
- Transboundary protected areas (W Transboundary Biosphere Reserve, Benin, Burkina Faso, Niger): Agnès Michelot, Associate Professor, Faculty of Law, Political Science and Management, University of La Rochelle, France; CEL member; and Boubacar Ouedraogo, In-Charge, Technical Assistance Unit, General Direction for Land Use Planning, Local and Regional Development, Economic and Finance Ministry, Burkina Faso

- Ecological corridors (Baekdu Daegan Mountain System, South Korea): Katie Miller, former Environmental Law Programme Officer, IUCN-RELPA; and Kim Hyun, Senior Programme Officer, IUCN Regional Protected Areas Programme, Asia.

During 2008, ELC continued to work with the steering group and the guidelines author to compile a comprehensive list of possible reviewers for the second draft of the guidelines. Patti Moore and her staff developed a template and software for reviewers to provide comments through an online survey and dedicated website. This phase was a technological challenge, with many rounds of feedback in order to find the best approach for recording and sorting comments. Special thanks go to Kate Watson and Katie Miller, both former Environmental Law Programme Officers, IUCN-RELPA, for their skills, interest and initiative in creating the online review programme and managing and sorting the resulting responses.

By mid-September 2008, the second draft of the guidelines was ready for review and posted on the project website for comment through the online survey or by other means. Individuals receiving this draft along with access to the online review were: (1) project steering group members; (2) WCPA and Marine Programme experts, and experts for selected types of protected areas; (3) authors of the case studies; (4) CEL members who indicated a special interest in participating; (5) participants of the 2008 CBD COP 9 side event and participants of the 2008 Ottawa workshop; (6) members of the CEL/WCPA Task Force; and (7) individuals on the CEL and WCPA electronic mailing lists.

This was the main review phase, and the following individuals deserve special thanks and acknowledgement for their comments:

- Michael Adams, Senior Lecturer, Institute for Conservation Biology and Law, University of Wollongong, Australia
- Daniela Addis, Legal Advisor, Ministry for the Environment, Land and Sea, Italy; IUCN Mediterranean Group; CEL member
- Charles Besançon, Head, Protected Areas Programme, United Nations Environment Programme, World Conservation Monitoring Centre (UNEP-WCMC); Vice Chair, WCPA
- Charles-Hubert Born, Professor at the Catholic University of Louvain, Belgium; lawyer; CEL member
- Grazia Borrini-Feyerabend, Vice Chair for Europe, CEESP; WCPA member
- Mary Jean Caleda, Assistant Dean, Ateneo School of Government, the Philippines; former Division Chief, DENR-PAWB
- Eleanor Carter, Environment and Development Consultant, UK
- Billy D. Causey, Regional Director, Southeast Atlantic, Gulf of Mexico & Caribbean, National Marine Sanctuary Program, National Oceanic and Atmospheric Administration (NOAA), USA; WCPA member
- Marianela Cedeño, independent consultant, Costa Rica; CEL member
- Carlos Chacón, The Nature Conservancy, Costa Rica; CEL member
- Maria Teresa Cirelli, law consultant, FAO, Italy
- Pepe Clarke, Legal Advisor, IUCN Regional Office for Oceania, Fiji
- Elizabeth De Santo, Marine Officer, IUCN-USA Multilateral Office, USA; CEL member
- Charles Di Leva, Chief Counsel, Legal Department, World Bank; CEL member
- Fanny Douvère, Intergovernmental Oceanographic Commission, United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and the Biosphere Programme (MAB)
- Nigel Dudley, Equilibrium, UK; WCPA member; Vice Chair, Capacity Building; Chair, Categories Task Force

- David Farrier, Professor of Law, Institute for Conservation Biology and Environmental Management, University of Wollongong, Australia; CEL member
- Edgar Fernández, Legal Advisor, Programa Regularización Catastro y Registro; Professor, Master of Environmental Law programme, University of Costa Rica; CEL/WCPA member
- Lucy Fish, World Database on Protected Areas (WDPA) Staff, UNEP-WCMC
- Alessandro Fodella, Professor, University of Trento, Italy; CEL member
- Karl Heinz Gaudry, Research Staff, University of Freiburg, Germany; WCPA member
- Laurent Granier, Director and Principal Consultant, Ecocy, France; CEL member
- Elery Hamilton-Smith, Professor, Environmental Studies, Charles Sturt University, Australia
- Sharelle Hart, legal consultant, Vanuatu; former Legal Officer, IUCN-ELC
- Mireille Jardin, former UNESCO staff member (MAB Programme); CEL member
- Jim Johnston, Project Manager, Parks Canada; WCPA member
- Simon Jolivet, LL.M. Candidate, Environmental Planning and Law, University of Limoges, France; intern, IUCN-ELC (2009)
- Stephen Keim, barrister, Australia; CEL member
- Lee Kimball, consultant, IUCN Global Marine Programme; CEL member
- Cyril Kormos, Vice President for Policy, The Wild Foundation, USA; CEL/WCPA member
- Ashish Kothari, founder and member, Kalpavriksh, India; former co-chair, IUCN-TILCEPA; WCPA member
- Carolina Lasen Diaz, Secretariat, Bern Convention, Council of Europe
- Antonio G.M. La Viña, Dean, Ateneo School of Government, the Philippines; former Undersecretary, DENR; CEL member
- Simon Marsden, School of Law, Chinese University of Hong Kong; CEL member
- Jeff McNeeley, Chief Scientist, IUCN; WCPA member
- Gabriel Michanek, Professor, Jurisprudence, Lulea University of Technology, Sweden
- Amy Milam, WDPA Content Officer, UNEP-WCMC
- Norma Molinyawe, DENR-PAWB, the Philippines
- Elisa Morgera, Legal Officer, FAO, Italy
- Ana Luisa Noguera, National Council of Protected Areas, Guatemala
- Nilufer Oral, Professor, Istanbul Bilgi University, Turkey; Co-Chair, IUCN CEL Oceans, Coastal and Coral Reefs Specialist Group
- John Parr, legal consultant, Thailand; CEL member
- Neema Pathak, member, Kalpavriksh, India; Coordinator, Conservation and Livelihoods Programme
- Alexander Ross Paterson, Associate Professor, Public Law Department, Institute of Marine and Environmental Law, University of Cape Town, South Africa; CEL member
- Darlene Pearson, Director of Legislation and Policy, Parks Canada; CEL member
- Patricia Perez, Legal Advisor, National Environmental Authority, Panama
- Guy Preston, National Programme Leader, Water Programme, South Africa
- Michel Prieur, Professor Emeritus, Limoges University, France; Scientific Director, CRIDEAU-OMIJ; CEL member
- Kim Ritchie, Coral Reef Scientist, Mote Marine Laboratory, USA
- Pedro Rosabal Gonzáles, Acting Head, IUCN-PPA (2009–10)

- Trevor Sandwith, former Director, Global Protected Areas Policy, The Nature Conservancy; former Deputy Chair, WCPA; Head, IUCN-PPA
- Lorenzo Schiano di Pepe, Lecturer in EU Law, University of Genoa; member IUCN Mediterranean Law Group; CEL member
- John Scott, Programme Officer, Traditional Knowledge, CBD Secretariat; CEL member
- Tullio Scovazzi, Professor of International Law, University of Milano-Bicocca, Italy; CEL member
- Peter Shadie, Coordinator, Regional Protected Areas Programme, Asia, IUCN Asia Regional Office, Thailand
- Annika Skonhøft, Legal Officer, FAO, Italy
- Pedro Solano, Director, Conservation Programme of the Peruvian Society for Environmental Law, Peru; CEL member
- Byron Swift, Head, World Parks, USA
- Caitlyn Toropova, Marine Protected Areas Conservation Officer, IUCN
- David L. VanderZwaag, Canada Research Chair (Tier 1) in Ocean Law and Governance, Marine & Environmental Law Institute, Dalhousie University, Canada; co-chair, CEL Oceans Specialist Group
- Lisa Watts, Principal Advisor, Environment and Resource Management, Queensland Government, Australia.

Other experts who provided information upon request are:

- Andrea Cattabriga, Association for Biodiversity and its Conservation, Italy; Member, Cactus and Succulent Specialist Group, IUCN Species Survival Commission
- Jae-Kyong Chun, Research Fellow, Korea Legislation Research Institute; CEO, National Nature Trust, Republic of Korea
- Héctor M. Hernández Macías, Chair, Cactus and Succulent Specialist Group, IUCN Species Survival Commission.

The IUCN World Conservation Forum in October 2008 in Barcelona provided the next opportunity to stress the importance of a sound legal infrastructure for protected areas, and to present the guidelines project. ELC organized a panel discussion on overarching principles and mechanisms for protected areas law, with the guidelines author representing CEL, and Ben Boer and Melinda Janki representing the CEL/WCPA Task Force. Special thanks are extended to Charles Di Leva, Chief Counsel, Legal Department, World Bank, and CEL member, for chairing the panel and to Yoko Watanabe, Biodiversity Specialist and Programme Manager, Global Environment Facility (GEF), for addressing the issue of financial sustainability of protected areas, including the work of GEF.

By June 2009, a third draft of the guidelines had been prepared, incorporating the comments, suggestions and additional information received through the online survey and other submissions. In mid-July 2009, ELC convened a second review workshop in Bonn to focus on the revised draft and to review the first drafts of the case studies. This workshop was particularly important for the project since the text of the guidelines and case studies could begin to be linked. Another agenda item was to identify ways to promote the guidelines once published and other supportive future work. Following this workshop, the project steering group held its third meeting to discuss the results and provide further advice to the authors. A special note of thanks and gratitude is due to the participants of the second workshop, many of whom subsequently contributed additional materials in response to special requests. In addition to the project steering group, we wish to acknowledge and thank the following individuals:

- Michael Adams, Senior Lecturer, Institute for Conservation Biology and Law, University of Wollongong, Australia
- Jamie Benidickson, Professor, Faculty of Law, University of Ottawa, Canada; CEL member
- Billy D. Causey, Regional Director, Southeast Atlantic, Gulf of Mexico & Caribbean, National Marine Sanctuary Program, NOAA, USA; WCPA member
- Nigel Dudley, Equilibrium, UK; WCPA member; Vice Chair, Capacity Building; Chair, Categories Task Force
- David Farrier, Professor of Law, Institute for Conservation Biology and Environmental Management, University of Wollongong, Australia; CEL member
- Stefan Gruber, PhD Candidate, Australian Centre for Climate and Environmental Law, Faculty of Law, University of Sydney; legal practitioner, Chamber of Lawyers Frankfurt am Main, Germany
- Armelle Guignier, Researcher, Centre for Water Law, Policy and Science, University of Dundee, Scotland; former Chargée-de-mission, CRIDEAU-OMIJ, University of Limoges, France; CEL member
- Ashish Kothari, founder and member, Kalpavriksh, India; former co-chair, IUCN-TILCEPA; WCPA/CEESP member
- Antonio G.M. La Viña, Dean, Ateneo School of Government, the Philippines; former Undersecretary, DENR; CEL member
- Agnès Michelot, Associate Professor, Faculty of Law, Political Science and Management, University of La Rochelle, France; CEL member
- Alexander Ross Paterson, Associate Professor, Public Law Department, Institute of Marine and Environmental Law, University of Cape Town, South Africa; CEL member
- Trevor Sandwith, former Director, Global Protected Areas Policy, The Nature Conservancy; former Deputy Chair, WCPA; Head, IUCN-PPA
- Pedro Solano, Director, Conservation Programme of the Peruvian Society for Environmental Law, Peru; CEL member
- Lorenzo Soto Oyarzún, Director, Sociedad Chilena de Derecho Ambiental (Environmental Law Society), Chile; CEL member
- David L. VanderZwaag, Canada Research Chair (Tier 1) in Ocean Law and Governance, Marine & Environmental Law Institute, Dalhousie University, Canada; co-chair, CEL Oceans Specialist Group
- Graeme Worboys, Protected Areas Management Specialist, Australia; WCPA Vice Chair on Mountains and Connectivity Conservation.

Following the second review workshop, a revised draft of the guidelines was completed, by then nearly in final form, for review by the project steering group at their fourth and final meeting in February 2010 in Bonn. This draft was further revised to incorporate the final round of steering group comments from the February 2010 meeting. A pre-publication draft of the guidelines was launched at the 10th Conference of the Parties to the Convention on Biological Diversity (CBD COP 10) in late October 2010, in Nagoya, Japan. On that occasion, ELC organized a panel of speakers which included the guidelines author and three project steering group members: Ben Boer, Alejandro Iza and Patti Moore. A special note of thanks is due to two distinguished individuals representing WCPA and CEL on the panel, who offered remarks from their Commissions' perspectives: Antônio Herman Benjamin, Deputy Chair, CEL; and Trevor Sandwith, Deputy Chair, WCPA.

Special recognition is also due to a number of ELC legal interns who provided valuable support with the research and production of various boxes that appear throughout the guidelines: Gordon McGuire, LLM Candidate, Dalhousie Law School, Canada (2008); Emilie Champagne, LLB Candidate, Common Law

Faculty, University of Ottawa, Canada (2009); Simon Jolivet, LLM Candidate, Environmental Planning and Law, University of Limoges, France (2009); and Pauline Verrière, Masters in Environmental Law and Urban Planning, University of Limoges, France (2010). Mira Bai Simon, Master of Environmental and Natural Resources Management, Université Bordeaux IV, France (2009), assisted with the project communication strategy. Tanya Baycheva, ELC project officer, and Nikolas Schmitz, ELC student assistant, also provided extensive support in preparing and fact-checking a number of boxes.

Many other individuals have been involved in helping to make this project a success. Special thanks go to all the staff of ELC who worked mostly behind the scenes to provide essential support throughout the project. In particular, two individuals should be identified: Anni Lukács, Senior Documentation and Information Officer, who was responsible for publication copy-editing, proof-reading and supervision, and Ann DeVoy, Project Administrator, who handled the many administrative and logistical tasks for the project as a whole.

Finally, two crucial tasks were achieved with the assistance of independent consultants. The index was produced by Maureen MacGlashan who, with her usual expertise, developed a tool that greatly facilitates use of the guidelines. Second, our wholehearted thanks go to Firuza Pastakia, the general editor, who assisted in checking facts and ensuring clarity of language throughout the guidelines and its case studies.

Producing the *Guidelines for Protected Areas Legislation* was a challenging exercise. We hope and trust that they will assist in developing and implementing protected areas law on a worldwide basis, to meet the challenges of the present day as well as the challenges that lie ahead.

Françoise Burhenne-Guilmin

Senior Counsel, IUCN-ELC

Project Director

Barbara J. Lausche

Author

CEL/WCPA member

Acronyms and abbreviations

Aarhus Convention	Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998)
ACCOBAMS	Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (1996)
ASCI	area of special conservation interest
Bern Convention	Convention on the Conservation of European Wildlife and Natural Habitats (1979)
CBD	Convention on Biological Diversity (1992)
CEO	chief executive officer
CMS	Convention on the Conservation of Migratory Species of Wild Animals (1979)
CoE	Council of Europe
EEZ	exclusive economic zone
EIA	environmental impact assessment
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
IAS	invasive alien species
ICCA	indigenous and community conserved area
ILO 169	International Labour Organization Convention 169 on Indigenous and Tribal Peoples in Independent Countries (1989)
IMO	International Maritime Organization
IUCN	International Union for Conservation of Nature
IUCN-CEESP	IUCN Commission on Environmental, Economic, and Social Policy
IUCN-ELP	IUCN Environmental Law Programme
IUCN-WCC	IUCN World Conservation Congress
IUCN-WCPA	IUCN World Commission on Protected Areas
IUCN-WPC	IUCN World Parks Congress
LMMA	locally managed marine area
LTA	Land Trust Alliance
MAB	Man and the Biosphere Programme
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto
MEPC	Marine Environment Protection Committee
MOU	memorandum of understanding
MPA	marine protected area
NGO	non-governmental organization

Acronyms and abbreviations

OSPAR Convention	Convention for the Protection of the Marine Environment of the North-East Atlantic (1992)
PEEN	Pan-European Ecological Network
PPA	private protected area
PSSA	particularly sensitive sea area
Ramsar Convention	Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971)
SAC	special area of conservation
SPA and Biodiversity Protocol	Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (1995)
SPAMI	specially protected areas of Mediterranean importance
TBPA	transboundary protected area
TBR	Transboundary Biosphere Reserve
UK	United Kingdom
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea (1982)
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
US	United States
WCED	World Commission on Environment and Development
WCMC	World Conservation Monitoring Centre
WDPA	World Database on Protected Areas
World Heritage Convention	Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
WSSD	World Summit on Sustainable Development

Introduction to the guidelines

A The setting

As the first decade of the 21st century draws to a close, most countries of the world have established protected areas. Virtually all such areas enjoy some form of legal protection. Growth in protected areas has continued to trend upward since the 1960s, when data showed only about 1.5 per cent of the earth's surface covered. Today, more than 12 per cent of the earth's surface is part of some type of formal protected area (see Box Intro-1). But scientific assessments indicate that biodiversity and ecosystem integrity are continuing to decline at an accelerating rate. As never before, protected areas are being recognized as essential for nature and biodiversity conservation in order to maintain the basic ecosystem services and functions that sustain human life as we know it. They complement other land uses, promote environmental protection and support regulations aimed at the sustainable use of biological resources outside protected areas.

1

Despite progress made in recent decades with the expansion of classic state-owned or state-controlled protected areas, there is growing scientific agreement and policy recognition that existing areas are not sufficient to meet the increasing challenges of biodiversity conservation. This is particularly evident in the case of marine protected areas (MPAs), where less than 2 per cent of the total marine area within the exclusive economic zones of most countries is so designated.

2

Today the world's biodiversity is estimated to be experiencing rates of extinction at least 1,000 times higher than any time previously in Earth's history, with some 20,000 species known to be threatened with extinction and many more likely to be threatened (Barber et al., 2004, p. 30). Globally, ecosystem services are also being degraded or used unsustainably at accelerating rates.

3

Protected areas face increasing threats from both direct and indirect causes (Worboys et al., 2006, pp. 223–261). Direct threats arise within protected area boundaries, for example, from poor management, illegal logging, the introduction of invasive alien species, on-site pollution, mineral resource extraction, unsustainable use of plants and animals, unsustainable visitor use, and on-site natural events (tsunami, fire, earthquake, volcanicity, avalanche, glacier break-up). Indirect threats come from outside protected areas and are caused by factors such as inappropriate land use decisions, off-site pollution, urban expansion, off-site ecosystem degradation, off-site natural events, and the consequences of poverty and civil conflict.

4

Over the last decade, climate change has come to be recognized as one of the most significant indirect threats to human and natural systems. According to some protected areas practitioners, climate change presents “the greatest threat ever” to national parks and other protected areas (Saunders et al., 2009). Protected areas will be affected by climate change at least as much as other lands and waters. In fact, some scientists expect that the impact on protected areas may be greater because fewer adaptation options may be available in such areas, compared to lands and waters that are more actively manipulated. Climate change will create the need to expand existing protected areas, designate new protected areas and pay increased attention to connectivity conservation. This will be important in order to cover species and ecosystems in need of protection in their current and future ranges, as well as to protect and expand the capacity of forests, grasslands and marine systems to prevent the loss of carbon already stored in plants and soils and to sequester further carbon from the atmosphere.

5

Box Intro-1: Worldwide coverage of protected areas

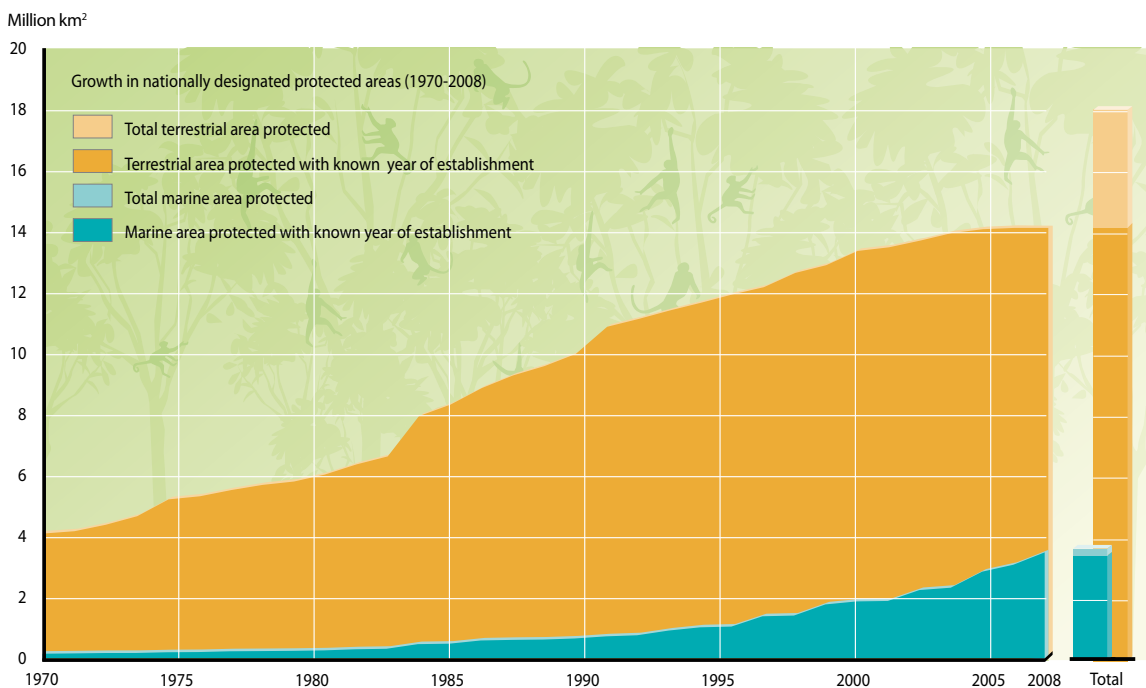
As of January 2009, 122,512 nationally designated terrestrial and marine protected areas in 235 countries and territories were included in the World Database on Protected Areas (WDPA). These areas cover 21,242,195 sq km, or about 12.1 per cent of the earth's surface. This includes both terrestrial and marine protected areas but does not include sites designated under the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972), or national sites that have been proposed but are not officially declared. Of the 122,512 national protected areas included in the WDPA, 5,674 are situated in marine areas under national jurisdiction, covering roughly 0.7 per cent of the world's oceans and approximately 2.58 million sq km (Laffoley, 2008; UNEP-WCMC, 2009; Lucy Fish, personal communication). Marine ecosystems continue to be critically under-represented.

There has been considerable progress in the growth of protected areas over recent decades (see Figure A). According to the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC), in 1962 there were 9,214 sites covering 2.4 million sq km. By 1992, these figures had grown to 48,388 protected areas covering 12.3 million sq km. Since 1992, the latest figures reveal that the number of recorded areas has grown some 250 per cent and surface coverage has increased by roughly 174 per cent.

As of 2007, transboundary protected areas between two or more countries numbered 227, covering 4.6 million sq km (GTPAN, 2007c). The methods used to derive these numbers are not as developed as those for national protected areas. However, significant advances were made with the 2007 inventory, where the methods employed included: an adjacency analysis of protected areas done with geographic information systems (GIS) that used international borders, and the results of an earlier survey which asked protected area managers if they had cooperative relationships with neighbouring countries.

The UNEP-WCMC regularly adds new parameters to the WDPA, particularly for marine and transboundary protected areas.

Figure A: Growth in nationally designated protected areas



The WDPA is a joint project of the UNEP and IUCN (International Union for Conservation of Nature), produced by the UNEP-WCMC and the IUCN World Commission on Protected Areas (WCPA), working with governments and collaborating non-governmental organizations.

Source: WDPA website.

- Beginning in the 1990s, heads of state and multilateral organizations intensified efforts in international environmental law and policy in response to growing scientific evidence concerning the loss of biodiversity and the degradation of ecosystems and habitats. Among the many actions taken, the Convention on Biological Diversity (1992) (CBD) was adopted and the United Nations Conference on

Environment and Development (1992) produced the Rio Declaration and Agenda 21, the latter also known as the ‘earth’s action plan’. By 2000, several global conventions directly relevant for protected areas had entered into force and were well into implementation at the national level. Among the most prominent, in addition to the CBD, are the Convention on Wetlands of International Importance especially as Waterfowl Habitat (1971); Convention Concerning the Protection of the World Cultural and Natural Heritage (1972); Convention on the Conservation of Migratory Species of Wild Animals (1979); United Nations Convention on the Law of the Sea (1982); United Nations Framework Convention on Climate Change (1992); and United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994).

Regional agreements also experienced significant growth, for example, in Africa where a revised African Convention on the Conservation of Nature and Natural Resources was concluded in 2003. There were significant advances in the European Union (EU) as well, with the Habitats Directive and the Birds Directive that generated the Natura 2000 network of protected areas spread over EU member states.

These global actions underscore the growing concern about environmental changes on the planet and reflect efforts to promote effective international responses. This has been reinforced by the United Nations General Assembly in the United Nations Millennium Declaration (2000) which contains eight Millennium Development Goals to be achieved by 2015, including Goal 7, to ‘ensure environmental sustainability’. Among the indicators for measuring progress with Goal 7 is the “ratio of area protected to maintain biological diversity to surface area” (UN, 2003, indicator 26).

In this context, protected areas have become an important tool for the conservation and maintenance of biodiversity in all its aspects, including the diversity of species, genes and ecosystems. In this fast-changing, globally connected world, no protected area or wild species will be secure over time without a supportive legal and policy framework. Such a framework should reflect international obligations and guidance, protected area management principles with legal application, and good practice principles for effective national protected areas legislation. While legal content, style and structure will vary from one country to another, knowledge and experience is steadily improving about good practice and the basic common elements required in modern protected areas legislation. This is the focus of these *Guidelines for Protected Areas Legislation*.

B Purpose and audience

The purpose of these guidelines is to update and expand the original guidelines published in 1980 (Lausche, 1980), and to reflect new developments and emerging issues. These developments include significant advances in international environmental law, and an improved scientific understanding of the role of protected areas in nature conservation, including conserving biodiversity, maintaining ecosystem functions and supporting sustainable development.

Other advancements in the last three decades relate to improved scientific understanding about certain types of protected areas that require special attention in legislation. In particular, MPAs are now recognized as needing special legal treatment because of their unique biophysical features, management and enforcement needs, and in many cases the multiple authorities and laws involved. In the past, it had been assumed that MPAs could fit within a generic legal framework for protected areas which was overwhelmingly focused on and governed by the needs of terrestrial protected areas.

Today there is also broad consensus that protected areas must be planned and managed using an ecosystem approach. This approach requires that other public policy tools, such as those related to land

use planning, forestry, fisheries, land and marine resource use, tourism, and economic development are compatible with protected areas legislation.

- 13 Other developments related to the management and governance of protected areas also have implications for protected areas legislation. Today, in addition to the classic state-owned or state-controlled protected area, new governance types offer important management options. This is especially relevant in countries where possibilities exist to recognize voluntarily conserved areas as part of the formal protected areas system.
- 14 In light of these developments in international law, scientific understanding and management, countries will need to examine their own protected area laws with a view to updating them. One of the main purposes of these guidelines is to identify new or strengthened legal elements that countries should take into account in their protected area legal frameworks. These elements have broad applicability and general value because in many aspects of protected areas law the legal approach is similar, if not identical, across countries and jurisdictions. These guidelines are intended to serve as an aid in a legislative review and drafting process across the spectrum of national and local needs. It is also envisioned that these guidelines will stimulate ongoing dialogue between government authorities and stakeholders in all segments of society, with the aim of continuing to modernize national policy and legal frameworks to be most responsive to and supportive of conservation priorities, international law commitments, adaptive needs and sustainable development goals.
- 15 As with the original 1980 guidelines, the primary technical audience for these new protected areas legislation guidelines is the legal drafter working closely with protected area authorities as well as others involved in the legislative process. These guidelines will also be a valuable resource for those employed in executive agencies that oversee and implement other policies and programmes affecting or affected by protected areas legislation. In addition, these protected areas legislation guidelines will be useful for those involved with or interested in the progress, review or drafting of protected areas legislation. This includes all stakeholders, whether concerned or affected communities, organizations, corporations, groups or individuals. Another important audience anticipated for these guidelines includes those who are interested in the progressive development of protected areas law, whether students, professors or researchers.

C Scope

- 16 These guidelines cover terrestrial and marine protected areas within national jurisdiction. They apply to national legal frameworks as well as sub-national legal frameworks in federal states and in states where powers to enact protected areas legislation have been decentralized. They do not address protected areas beyond national jurisdiction.
- 17 These guidelines contemplate national protected area legal frameworks that provide for a full range of conservation objectives, from strict protection to multiple use. The principal consideration is that such areas should be established primarily for conservation, even though there may be multiple objectives. These guidelines also incorporate considerations for new approaches to the governance of protected areas that are included in the formal protected areas system. These approaches relate principally to voluntarily conserved areas of indigenous peoples, local communities, non-governmental organizations (NGOs), corporations and private individuals.
- 18 These guidelines take into account the fact that national legal frameworks are normally composed of several different types of instruments with varying degrees of legal authority and reach. Decisions

about the legal instruments best suited to give effect to various elements considered in these guidelines are left to the legal drafter working with protected area and other authorities as appropriate. Tools available may include executive policies, codes, laws, acts, decrees, norms, regulations, rules and subsidiary orders. Within a country's legal system, a hierarchy of legal instruments and operational tools is typically in place with standards for the content of each. Principal legislation (an act or law) may be comprehensive and all-inclusive, or may provide only overarching authority and principles, leaving subsidiary legal instruments to define details about specific components or requirements.

It is important to stress that not all legal elements considered in these protected areas legislation guidelines will apply in every country, fit within a single legal instrument or involve the same level of authority. The intention is to cover the full array of core legal principles and considerations for the legal drafter and the protected area authorities to draw upon, within the context of the country's international law obligations, local legal practice, and specific protected areas goals and needs. 19

The principles, concepts and elements laid out in these guidelines should not be seen as prescriptive but rather as information and guidance. They are not meant to provide a model. Every country's legal requirements and approaches with respect to national protected areas should be tailored to that society's needs. 20

D Sources of information and guidance

These guidelines rely on many sources of legal and technical information and guidance relevant for protected areas legislation. The primary sources of information are international treaties of relevance to protected areas, along with the guidance provided by decisions of the Parties to these treaties. Many of these decisions address obligations and formal commitments made by the Parties which require national legislative action in order to be fulfilled. Other important sources of information at the international level are the relevant decisions of international bodies such as those within the United Nations family and other international organizations, including IUCN, the International Union for Conservation of Nature. 21

Peer-reviewed publications in science, policy and law related to protected areas are a third important source of information. They reflect the latest understanding about the state of the world's protected areas with regard to biodiversity conservation, as well as best practice management principles for effective protected areas, and key tools and techniques that are necessary or important for protected area legal frameworks to meet the challenges of the 21st century. 22

IUCN membership decisions and technical guidelines carry special weight. The members of IUCN meet formally every four years as the World Conservation Congress (WCC), the highest decision-making body of the Union (known as the IUCN General Assembly until 1996). Many decisions in the form of recommendations and resolutions on protected areas have been taken by IUCN General Assembly and WCC sessions, and these form an important body of principles and guidance for protected areas law. From a global policy perspective, these decisions are particularly significant because IUCN has more than 1,000 members worldwide, including 84 states, 116 government agencies, 784 national NGOs, 96 international NGOs and 30 affiliates (IUCN, 2010a). 23

IUCN is also known for its sectoral and cross-sectoral policy and technical work, providing guidance through its six Commissions of volunteer experts and through its Secretariat programmes. In the field of protected areas, such policy and technical work is primarily carried out by the IUCN World Commission on Protected Areas (WCPA) and the secretariat's global Programme on Protected Areas (PPA) which administers IUCN-WCPA. The IUCN-WCPA mission is to promote the establishment and effective 24

management of a worldwide representative network of terrestrial and marine protected areas. Over more than 50 years since its creation, it has developed a global network of protected area specialists who help governments and others plan protected areas, provide strategic advice to policy makers, and work to strengthen capacity in protected areas planning and management on the ground.

- 25 Every 10 years, IUCN-WCPA and IUCN-PPA convene the IUCN World Parks Congress (WPC), a global forum of protected areas experts. While decisions of the IUCN-WPC are taken by the participating experts rather than by IUCN members, the forum provides policy and technical guidance on protected areas planning and management and helps define new concepts for the future of protected areas. Key recommendations made by the participants of each IUCN-WPC are normally submitted for consideration by IUCN members at a subsequent IUCN-WCC for endorsement. IUCN-WPC decisions are also an important source of information for these guidelines.
- 26 Other sources of technical information and guidance for these guidelines are the publications of IUCN-WCPA derived from its protected areas work in the field. In particular, it is worth singling out the IUCN-WCPA Best Practice Protected Area Guidelines series, which was launched in the late 1990s and has grown to 16 publications.
- 27 In addition, these protected areas legislation guidelines use the protected area management categories developed by IUCN-WCPA, adopted by the IUCN General Assembly in 1994 (IUCN, 1994) and further elaborated in 2008 (Dudley, 2008) as the frame of reference when discussing protected area conservation and management objectives. These management categories are recognized internationally. The CBD, among others, has endorsed their use. These categories are also used to record national and transboundary protected areas in the World Database on Protected Areas (WDPA), from which the United Nations List of Protected Areas is produced.
- 28 Virtually all other IUCN commissions and programmes deal with protected areas in some way. The two that are most prominently involved in protected areas issues are the IUCN Environmental Law Programme (ELP) and the IUCN Commission on Environmental, Economic, and Social Policy (CEESP). They have also generated numerous documents analysing specific issues, articulating principles and producing case studies relevant for protected area legal frameworks. These guidelines also rely heavily on such publications. Considering their important contribution, it is worth elaborating on the functions and scope of the ELP and CEESP.
- 29 IUCN-ELP is comprised of the Environmental Law Centre (ELC) and the Commission on Environmental Law (CEL), a worldwide network of environmental law specialists. IUCN-ELP's mission is to advance sustainability through the development of legal and policy concepts and instruments, and by building the capacity of societies to develop and implement environmental law and policy. Among its main contributions over more than 40 years are the conceptual development of international and national environmental law, the provision of technical legal advice, and the production of studies, guidelines and analyses, including surveys and synopses, of developments and trends in the field of environmental law. Many IUCN-ELP guidelines and legal technical publications have been critical sources of information for these protected areas legislation guidelines. It is worth highlighting, in particular, the IUCN Environmental Policy and Law Paper series which began in 1972 and has grown to 80 publications, many of which are available online.
- 30 IUCN-CEESP is an interdisciplinary network of professionals who provide technical expertise and advice on the environmental, economic, social and cultural aspects of IUCN's mission, including in relation to protected areas. IUCN-CEESP also generates significant information and guidance through its publications. IUCN-CEESP publications on protected areas governance in particular are important sources of information for these guidelines.

In addition to the sources noted above, secondary sources of information have also been consulted. 31
 These sources, in the form of studies, surveys, evaluations, reviews and commentaries, have been valuable as a reflection of the latest scientific and legal thinking on concepts and principles important to meet current and emerging challenges to protected areas, including climate change. Online sources of information have been identified wherever possible.

E Generic terms

The range of terrestrial and marine protected area types with conservation as the primary objective is broad, and the terms used for specific protected areas (for example, national park, marine reserve) vary considerably from country to country. An effort has thus been made in these protected areas legislation guidelines to minimize the use of specific labels or protected area classifications. 32

These protected areas legislation guidelines use a number of terms interchangeably or with special meaning: 33

- **Co-management** is used to mean ‘shared governance’ as well. The IUCN-WCPA guidelines for applying protected areas management categories (Dudley, 2008) use the terms interchangeably. Co-management is already well established in protected areas legislation and is thus used throughout these guidelines. Early protected areas laws used the term ‘co-management’ and it has developed a legal history for lawyers and managers, including through IUCN and other best practice literature. Co-management agreements have been recognized as a legal tool and included in protected areas legislation for decades. Introducing a new term for the same concept could create significant uncertainty and confusion for continuity of implementation, interpretation and judicial review.
- **Ecosystem approach** is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.
- **Formal protected areas system** is used to refer to the system of protected areas officially declared, designated, established or recognized by the state pursuant to protected areas legislation. This system consists of state-owned or state-controlled protected areas and may also include the voluntarily conserved areas of indigenous or traditional peoples, local communities, corporations, NGOs, or private individuals that have been recognized as part of the official system.
- **Indigenous** includes tribal or traditional peoples, as well as aboriginal peoples in jurisdictions where that term is preferred.
- **Legislation, legal framework and legal provisions** are used interchangeably to refer to legal instruments that have statutory force, such as national laws or acts, executive decrees, or executive orders, as well as supporting subsidiary instruments such as regulations, rules, norms and other tools with legal or operational effect that are able to withstand judicial review.
- **Marine protected areas** refers to protected areas located within marine and coastal areas under the jurisdiction of a coastal state, and may include transboundary MPAs. Depending on the context, the term refers to MPAs as well as marine and coastal protected areas.
- **National**, in relation to protected area systems and authorities, includes the sub-national (province, state) level in federal systems of government and decentralized government systems where protected area legal powers and responsibilities have been delegated or devolved.
- **Protected areas authority and protected areas agency** are used interchangeably.
- **Stakeholder** includes rightsholders and all parties with ownership, tenure, use or other special rights or interests, including traditional or customary rights to lands, waters or resources.

- **State-owned or state-controlled protected areas** refers to the classic type of protected area in land or sea that is established and managed by the state. In some jurisdictions, these protected areas are known as conventional, government or public protected areas.
- **Treaty** includes conventions, agreements, protocols, accords and other legally binding instruments concluded in writing between two or more states.
- **Voluntary conservation initiatives** refers to conservation initiatives by communities, corporations, NGOs or individuals. These may include indigenous or local communities holding property rights in common or collectively, as well as private landowners.

F Organization

- 34 These protected areas legislation guidelines are divided into four parts. Parts I and II discuss basic principles and obligations, providing background for the generic elements of protected areas legislation that are laid out in Part III. Part I focuses on best management principles, good governance, global and regional multilateral legal obligations, and international policy guidance. Part II provides an overview of the diverse governance types increasingly being recognized in protected areas legislation for possible inclusion in formal protected area systems. These governance types include voluntary conservation initiatives undertaken by indigenous and local communities, and private entities.
- 35 Part III concentrates on the elements of modern protected area legal frameworks, the overall purpose of this project. It begins with a summary of pre-drafting preparations and consultations that the legal drafter working with protected area authorities should undertake, where relevant and feasible. It then examines each of the core elements for protected areas legislation. In explaining and illustrating these elements, Part III draws upon and incorporates principles, concepts, obligations and guidelines introduced in Parts I and II. Part III is divided into two chapters. Chapter 1 discusses the generic elements of principal protected areas legislation, while Chapter 2 examines additional considerations important to take into account when drafting legal provisions for MPAs under national jurisdiction.
- 36 Part IV examines the special case of transboundary protected areas (TBPAs). It focuses on the legal considerations associated with international or transboundary arrangements between the countries involved in a TBPA. Legal considerations associated specifically with the national components of TBPAs are included in the generic elements discussed in Part III.
- 37 It is worth noting that throughout these four Parts, important ideas and concepts are repeated from time to time. This technique is used for emphasis as well as ease of reference. The aim is to allow individual sections of the guidelines to be read independently as far as possible.
- 38 At the conclusion of these guidelines, a thematic bibliography is provided in addition to a list of references. The thematic bibliography has been included to assist the reader in identifying and viewing sources in specific areas of interest. Wherever possible, online access information has been included so that readers may download documents that are available in electronic form. In the case of websites, however, it is worth keeping in mind that URLs are frequently subject to change.
- 39 Eight case studies of national and sub-national legal frameworks for protected areas, and seven case studies of legal frameworks governing specific protected area types have been prepared to accompany these protected areas legislation guidelines. The case studies provide on-the-ground insights into experiences being gained and lessons learned from legislation currently in force in 13 countries around the world. The case studies are supported by nine matrices identifying specific legislative provisions in eight jurisdictions, using a common outline to facilitate comparative study.

- The case studies of national or sub-national frameworks are: 40
- Australia (federal)
 - Australia (New South Wales)
 - Canada (federal)
 - Canada (Ontario)
 - France
 - Peru
 - Philippines
 - South Africa.
- The case studies of legal frameworks governing specific protected area types are: 41
- community conserved areas (Natural Park of the Ampezzo Dolomites, Italy)
 - indigenous and community conserved areas (India)
 - indigenous–government co-management (Booderee National Park, Australia)
 - marine protected areas (the Gully off the Coast of Nova Scotia, Canada)
 - private protected areas (Pumalin Park, Chile)
 - transboundary protected areas (W Transboundary Biosphere Reserve, Benin, Burkina Faso, Niger)
 - ecological corridors (Baekdu Daegan Mountain System, South Korea).
- The matrices that accompany the case studies are: 42
- Australia (federal)
 - Australia (New South Wales)
 - Australia (Great Barrier Reef)
 - Canada (federal)
 - Canada (Ontario)
 - France
 - Peru
 - Philippines
 - South Africa.
- The *Guidelines for Protected Areas Legislation* are available in print in English, French and Spanish. Each of the printed volumes is accompanied by a CD-ROM which contains the relevant electronic version of the guidelines as well as the case studies and matrices. 43
- ## G Looking ahead 44
- Law evolves in response to changing societal needs. Protected areas law and policy will continue to emerge and progress as new scientific information is gained about biodiversity and how it is affected by human activities, such as changing land uses, as well as natural factors, such as climate change. Protected areas law will also continue to respond to developments in international law. Similarly, developments will continue to occur at the administrative level and in the courts, as governments and societies integrate this new understanding into law. The complexities of these issues will unfold and shape national protected areas law, land use law, climate change law and other associated areas in the decades ahead.

- 45 The outputs of this project represent a significant step forward from the original guidelines of 1980. But guidelines in law are always a work in progress. The collective efforts of lawyers, scientists, protected area managers and conservationists must continue in a multidisciplinary way to address ongoing and new challenges in the field of environmental law. These ongoing efforts should continue to elaborate elements that are important to include in protected area legal frameworks. This is essential if the law is to remain effective in supporting national protected areas and bolstering their critical global role in nature conservation and sustainable development. It is hoped that users of the *Guidelines for Protected Areas Legislation* will find them to be a practical and instructive aid for advancing this goal.

Part I: Basic principles and obligations

This Part, together with Part II on governance approaches, lays the foundation for the generic elements of protected areas legislation in Part III. Part I highlights significant advances in protected area management principles and international law and policy that are important to consider and incorporate, subject to local legal practice, in contemporary protected areas legal frameworks.

Introduction

In recent decades, scientific understanding has significantly progressed about the critical role of both terrestrial protected areas and marine protected areas (MPAs) for biodiversity conservation and the maintenance of life-support systems on the planet. In particular, the understanding of key elements for effective protected areas design and management has made substantial headway. In response to these advances, international law and policy for protected areas and biodiversity conservation have made parallel strides in articulating policies, obligations, principles and guidance. 1

Part I highlights the best practice principles and international law and policy obligations that are shaping the form and content of modern protected areas legislation. It provides essential background for the legal drafter working with protected areas authorities on what should be included as the generic elements for protected areas legislation identified in Part III and why these elements are so important to consider. 2

The Part begins with internationally recognized definitions of protected areas along with an elaboration of terms and requirements for protected areas to be included in the World Database on Protected Areas (WDPA). With this baseline, several protected areas best practice management principles with legal application are reviewed, followed by a discussion of governance principles. 3

The final section reviews the main global conservation conventions and the principal obligations and commitments flowing from these instruments that would normally be implemented through national protected areas legislation. Examples of regional legal instruments are also provided. The obligations and commitments made under such legal instruments, whether international, regional or bilateral, provide the baseline of requirements for national legislation. The Part closes with a discussion of international policy instruments that further reflect commitments of the world community to guiding principles important for national protected areas policy and law. One aim of this section is to emphasize the essential role of the legal drafter in assessing all multilateral law and policy commitments made by the country, as a basis for drafting provisions that effectively incorporate such obligations in protected areas legislation. 4

1 Protected areas defined

1.1 IUCN definition

In 1994, IUCN, the International Union for Conservation of Nature, developed a definition of protected areas to be used with a revised international system of protected area management categories adopted by the IUCN General Assembly (IUCN GA 1994 19.4). The resulting publication, *Guidelines for Protected Area Management Categories* (IUCN, 1994), became an important guide for countries developing their 5

own protected area definitions and categories. The 1994 IUCN guidelines define a protected area as follows:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. (IUCN, 1994, p. 7).

- 6 In 2008, the IUCN World Commission on Protected Areas (WCPA) issued a slightly revised definition as part of an exercise to review and update the 1994 guidelines in response to a request from the 2004 World Conservation Congress. This 2008 definition was included in an IUCN-WCPA publication, *Guidelines for Applying Protected Area Management Categories* (Dudley, 2008), which was launched at the 2008 World Conservation Congress. The 2008 IUCN-WCPA definition provides:

A protected area is a clearly defined geographical space recognized, dedicated and managed, through legal and other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (Dudley, 2008).

- 7 Operationally, the 2008 definition is now the one used by IUCN in its work on protected areas, and it is promoted by the WCPA and IUCN's Programme on Protected Areas (PPA). The United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC) also uses the 2008 definition for the WDPA.

- 8 The 2008 IUCN-WCPA definition of protected areas is the version used for these guidelines on protected areas legislation.

- 9 **Explanation of terms.** Importantly, the 2008 definition is elaborated through an extensive explanation of key terms (see Table I-1). This explanation of terms is particularly useful for the legal drafter and protected area authorities to understand the new definition's intended scope and meaning for protected areas legislation in the 21st century. Countries that have incorporated the 1994 definition in their legal frameworks may consider that the two definitions are not inconsistent with each other. The 2008 definition amplifies and updates the 1994 definition, based on experience gained by protected area professionals in IUCN-WCPA.

- 10 Two terms in the above explanations are worth highlighting here for the new emphasis they give to the 2008 definition. First, the explanation of terms indicates that protected areas should be designed and managed to cover three-dimensional space, whether on land or sea. This is clarified by the explanation of the phrase 'clearly defined geographical space', introduced in the 2008 definition, to mean: (1) airspace above a protected area being protected from such activities as low-flying aircraft; (2) surface area of the designated land or water body being protected, as has been the traditional approach to defining the physical scope of a protected area; and (3) subsurface space, including the water column and sea bed. In support of this clarification, the 2008 IUCN-WCPA guidelines encourage governments to consider a general legal provision safeguarding protected areas from all threats above and below ground as well as under water, including mining or other extractive activities, underwater noise, dredging and fishing (Dudley, 2008, p. 9).

- 11 Second, the explanation of terms emphasizes that the term 'nature' *always* refers to biodiversity at the genetic, species and ecosystem levels, and also often refers to 'geodiversity'. Geodiversity covers landforms and other geological features (for example, rocks, minerals, sediments and soils), along with the natural processes which form and alter them, such as hydrologic cycles. Together with biodiversity, protecting geodiversity values should be a key consideration in the establishment, design and management of terrestrial and marine protected areas. Similarly, the protection and compatible management of connecting rivers and coasts should be a key consideration where hydrologic processes are involved.

Table I-1: Explanation of terms used in the IUCN-WCPA 2008 definition of protected areas

Phrase	Explanation*
Clearly defined geographical space	Includes land, inland waters, marine and coastal areas or a combination of two or more of these. 'Space' has three dimensions: airspace, surface and subsurface (applicable to land and marine). 'Clearly defined' implies a spatially defined area with agreed and demarcated borders which may be defined by physical features that move over time (for example, river banks) or by management actions (zoning, including no-take zones).
Recognized	Implies that protection can include a range of governance types declared by people as well as those identified by the state, but that such sites should be recognized in some way, in particular through listing in the WDPA.
Dedicated	Implies specific binding commitment to conservation in the long term through, for example, international conventions and agreements; national, provincial and local law; customary law; covenants of non-governmental organizations (NGOs), private trusts and company policies; certification schemes.
Managed	Assumes some active steps to conserve the natural (and possibly other) values for which the protected area was established; 'managed' may include a decision to leave the area untouched if this is the best conservation strategy.
Legal or other effective means	Means that protected areas must either be gazetted (that is, recognized under statutory civil law), recognized through an international convention or agreement, or else managed through other effective but non-gazetted means, such as through recognized traditional rules under which community conserved areas operate, or the policies of established NGOs.
... to achieve	Implies some level of effectiveness—a new element that was not present in the 1994 definition but which has been strongly requested by many protected area managers and others. Although the category may still be determined by objective, management effectiveness will progressively be recorded on the WDPA and over time will become an important contributory criterion in identification and recognition of protected areas.
Long term	Protected areas should be managed in perpetuity and not as a short-term or temporary management strategy.
Conservation	In the context of this definition, conservation refers to the in-situ maintenance of ecosystems and natural and semi-natural habitats, and of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.
Nature	In this context, nature always refers to biodiversity, at genetic, species and ecosystem level, and often also refers to geodiversity, landforms and broader natural values.
Associated ecosystem services	Means ecosystem services that are related to but do not interfere with the aim of nature conservation. These can include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other non-material benefits.
Cultural values	Includes those that do not interfere with the conservation outcome (all cultural values in a protected area should meet this criterion), including in particular: those that contribute to conservation outcomes (for example, traditional management practices on which key species have become reliant), and those that are themselves under threat.
* The 2008 IUCN-WCPA guidelines also contain an appendix entitled 'Typology and glossary' with additional terms used by governments and others in connection with the categories, drawn wherever possible from IUCN or CBD sources (Dudley, 2008, pp. 81–84).	
<i>Source: Dudley, 2008, pp. 8–9.</i>	

It is important to include in this discussion the definition provided by the Convention on Biological Diversity (CBD) (1992). The CBD is the one international treaty directly obliging countries who are Parties to set up protected area systems for biodiversity conservation. The text of the convention provides:

12

“Protected area” means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives (Art. 2).

- 13 The 2008 IUCN-WCPA definition and the CBD definition both convey the same general message. Both explicitly require that conservation objectives are specified for protected areas and that such areas are geographically defined. The CBD definition is less explicit in some respects. For example, it makes no reference to long-term protection, cultural values or the requirement that sites should be designated or regulated and managed through legal or other effective means. However, these and many other aspects have been recognized and elaborated in subsequent decisions of the CBD Conference of the Parties, and in expanded guidelines and other supporting documents that the Parties have adopted.

1.2 Guiding principles

- 14 The 2008 IUCN-WCPA definition is accompanied by certain principles that address how the definition is to be understood and applied within protected area systems. They include the following:

For IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority;

Protected areas must prevent, or eliminate where necessary, any exploitation or management practice that will be harmful to the objectives of designation; [...]

Protected areas should usually aim to maintain or, ideally, increase the degree of naturalness of the ecosystem being protected (Dudley, 2008, p. 10).

1.3 Special applications

- 15 The IUCN definition of protected areas is intended to be applied to protected areas across biomes, ownership and governance types, motivations, management objectives, and jurisdictional levels. This includes marine areas, forest areas, inland water areas, sacred sites, and areas voluntarily conserved by communities and indigenous or traditional peoples, as well as private protected areas (PPAs). While the definition does not cover all biosphere reserve zones under the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and the Biosphere (MAB) Programme, it would apply to the core zones of biosphere reserves which, according to MAB requirements, should be legally constituted areas or areas devoted to long-term protection. Special applications of the IUCN definition are discussed below.

- 16 **Marine protected areas.** The 2008 IUCN-WCPA definition of protected areas is intended to apply to MPAs. This application builds on a definition specific to marine areas which was developed by the WCPA, adopted by the IUCN General Assembly in 1988 (IUCN GA 1988 17.38) and is used in the IUCN-WCPA best practice publication, *Guidelines for Marine Protected Areas* (Kelleher, 1999). The 1988 definition provides that an MPA is:

Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.

- 17 While the generic 2008 IUCN-WCPA definition loses the specific reference to the marine environment, its application aims to clarify the distinction between conservation-focused sites, which qualify as MPAs listed in the WDPA, and other areas where the primary purpose is extractive use (for example, fisheries management areas), which would not qualify. As with terrestrial protected areas, the terminology used for MPAs varies in different jurisdictions, such as marine park, marine sanctuary, marine reserve, marine monument, marine conservation area or simply MPA. Regardless of terminology, the important

consideration is that the marine site should fit the 2008 protected areas definition and, then, any more specific definitions the jurisdiction may choose to apply. This and other special issues related to legislation for MPAs are covered in Part III, Chapter 2, of these protected areas legislation guidelines.

It is worth noting for the benefit of the legal drafter that at its first meeting in 1994 the CBD Conference of the Parties identified marine and coastal biodiversity as an early priority, and in 2000, at its fifth meeting, decided to establish an Ad Hoc Technical Expert Group for marine and coastal protected areas. The Expert Group adopted a definition for marine and coastal protected areas in its resulting report. This was welcomed by the Seventh Meeting of the Conference of the Parties in 2004, which noted that the definition incorporated all of the IUCN categories of protected areas (CBD COP 2004 VII/5, para. 10 and fn. 1). The CBD definition provides that the term marine and coastal protected area means

any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings (SCBD, 2004b, p. 7).

Forest protected areas are also a special application of the 2008 IUCN-WCPA protected areas definition. Forested sites occurring within an identified protected area *may* qualify as forest protected areas where the primary objective is the conservation of biodiversity.

IUCN has provided guidance for identifying possible forest protected areas (Dudley and Phillips, 2006). In particular, such areas should include a substantial amount of forest, all or part of which may be a protected area. Because forests may serve multiple functions, land being restored to natural forest should be counted if the principal management objective is the maintenance and protection of biodiversity and associated cultural values. 'Cultural forests' should also be included if they are being protected primarily for biodiversity and associated cultural values. Forests not likely to qualify as protected areas include those managed for the protection of resources other than biodiversity (such as forests set aside for watershed or drinking water protection, for avalanche control, as firebreaks or windbreaks, or for erosion control). Forests managed primarily as a community resource (such as forests managed for non-timber forest products, fuel wood and fodder, and recreational or religious purposes) would also not qualify, nor would forests with unclear primary management objectives where biodiversity protection is an equal or lesser priority along with other uses (Dudley, 2008).

It should be stressed, however, that many forested areas which do not qualify as formal protected areas may serve important supportive conservation functions, including as buffer zones and ecological corridors connecting habitats and ecosystems, or may serve other connectivity functions. Protected areas legislation could recognize and reinforce these important supportive functions in provisions associated with buffers and connectivity (discussed further in Part III, Chapter 1, section 7.3).

Inland water protected areas are another special application. The 2008 IUCN-WCPA definition can apply to inland water features such as river corridors and lakes. Inland water protected areas may include inland wetlands with saline and brackish water as well as freshwater systems. The special hydrologic features of inland water systems encompass vast surface and subsurface areas spanning upstream, downstream and groundwater systems, all of which affect water flows, their timing and duration. Ideally, inland water protected areas should aim to cover an entire catchment. In practice, however, in most situations the protection of catchments will normally involve a combination of strategies including the designation of formal protected areas, other land use classifications compatible with catchment protection and environmental pollution control regulations.

Sacred sites may qualify as protected areas under the 2008 IUCN-WCPA definition where such sites possess natural values along with cultural values and fit other elements of the definition. Such sites

may include landscapes or seascapes. There is strong evidence that for many centuries sacred natural sites have been providing effective biodiversity conservation (Dudley, 2008, p. 64). This ‘cultural’ value is explicitly recognized in the IUCN-WCPA definition. When drafting provisions to recognize sacred sites as part of formal protected area systems, the legal drafter will want to include reference, as appropriate, to the need to balance the biodiversity values and the cultural or spiritual values of the site. In other words, the conservation objectives of the site and its associated management regime should ensure that cultural and spiritual values do not jeopardize biodiversity values and, conversely, that management of the site’s natural values does not detract from or damage its sacred values.

- 24 **Voluntarily conserved areas**, where they fit the IUCN-WCPA definition, may also qualify as formal protected areas. This is an emerging field for formal protected area systems and has generated particular attention for the new governance approaches or types that such initiatives may entail (see Part II, section 3). Voluntarily conserved areas are conservation initiatives undertaken by local communities, indigenous or traditional peoples, or private property owners on lands, waters or resources that they own, or over which they have long-term control. Such initiatives fall into two broad legal categories: (1) where indigenous or traditional peoples and local communities have long-term rights over the conserved lands or resources, which are held in common or by communal title; and (2) where the land being managed for conservation is privately owned by a ‘legal person’ which may be an individual, a for-profit corporation or a non-governmental organization (NGO), commonly a conservation NGO.
- 25 There is growing recognition that voluntary conservation initiatives worldwide are already conserving biodiversity in vast expanses of land. Where such areas meet the requirements of the protected areas definition, and there is mutual agreement between the government and the entity undertaking the voluntary conservation, designation as part of the formal protected areas system provides significant potential for expanding the conservation of species and ecosystems nationally and regionally, and for helping to meet global biodiversity goals. The increased recognition of voluntarily conserved areas as part of protected area systems is promoted by the CBD, IUCN and many international organizations, as well as by a growing number of national governments.

1.4 Protected areas and sustainable development

- 26 An important element for modern protected areas policy and law is the link to socio-economic and sustainable development. The theme of the Vth IUCN World Parks Congress (WPC) held in 2003 was ‘Benefits beyond Boundaries’ to emphasize the vital role protected areas play in sustainable development and the critical importance of working with and supporting local communities if protected areas are to survive and achieve their conservation objectives.
- 27 The shift to more people-oriented conservation began in 1987 when the World Commission on Environment and Development (WCED) launched the concept of sustainable development. Sustainable development was broadly defined to mean development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 8). The concept was subsequently elaborated in the 2002 World Summit on Sustainable Development (WSSD) Plan of Implementation to consist of three constituent and overlapping pillars: environmental sustainability, social sustainability and economic sustainability.
- 28 Significantly for protected areas, the WCED brought biodiversity conservation into the framework of sustainable development. This connection gained momentum in the 1990s as IUCN developed protected area management categories that reached beyond strict nature reserves and wilderness areas to protected landscapes and seascapes as well as sustainable resource use areas involving more

human intervention and active management. In 2000, world leaders came together at the United Nations (UN) Headquarters in New York to adopt the UN Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty and setting out eight time-bound goals, known as the Millennium Development Goals. Of these, Goal 7 is to 'ensure environmental sustainability', and among the four targets for achieving this goal is to 'reduce biodiversity loss'. Some two years later, the WSSD meeting in 2002 linked biodiversity conservation, sustainable development and poverty eradication.

In response to these conceptual advances linking development and conservation, IUCN guidance on protected areas has moved significantly beyond the historical emphasis on protection of natural sites and species. Today areas are being recognized by IUCN, the international community and national systems for their ability to fit the IUCN protected areas definition as well as to support landscape and seascape conservation where human interaction with nature has produced significant interconnected ecological and cultural values. Similarly, areas are being recognized for their ability to fit the general IUCN protected areas definition and still support managed resource use on a sustainable basis. As discussed further in section 3.2.1, below, these types of areas are classified to meet the requirements of IUCN categories V and VI, respectively.

This broadened view of protected areas gives them added prominence as an important tool for sustainable development. Such areas, when well designed and effectively managed, generate benefits that may have direct and immediate economic and social value in addition to conservation value. This includes protecting habitat for commercial species (for example, fish) as well as endangered and threatened wild species, and protecting economically useful species for food, fibre and medicine. Such areas may also generate important revenues for local livelihoods through goods and services flowing from tourism or plant and animal products from locally managed species, as well as from scientific research.

2 Perpetual integrity

The 2008 IUCN-WCPA definition of protected areas is clear that an area should have secure conservation status over the long term. The explanation of terms accompanying the 2008 definition provides that 'long term' means the "protected area should be managed in perpetuity and not as a short-term or temporary management strategy" (see Table I-1). This feature is one of the main criteria that distinguishes whether or not a particular area of land or water is a protected area.

'Perpetuity' as a legal concept means forever. In application, it means providing safeguards to secure an area, by the best means available, for the long term. It is not possible to foresee or anticipate all future events that may threaten the legal status of a protected area. In practical terms, 'perpetuity' may be envisioned as a multi-generational time frame. The legal drafter should aim to include in protected areas legislation those decision-making processes, incentives and management tools that will facilitate and promote the long-term security of a protected area designation. The kinds of legal tools available may vary, depending on the legal status of the lands or waters being designated as protected areas.

Several techniques are used in protected areas legislation to secure the conservation commitment over the long term. These are incorporated as generic elements of protected areas legislation in Part III, and are worth a brief review here to illustrate how they can support the protected areas definition. First, an essential element to incorporate in protected areas legislation is the requirement that designation of any type of protected area intended to be part of the formal protected areas system should be by the highest possible policy-making body in the jurisdiction concerned, normally the legislature, parliament,

head of state or, in cases where the legal framework and standards are already well defined by law, the minister in charge of protected areas. Second, the legislation should contain a requirement that any decision to reduce or degazette an established site must be made by a policy-making body of equal or higher status than the body that designated the site.

- 34 These two requirements carry considerable weight in securing government commitment to protect and manage a designated protected area over the long term. This security is grounded in the principle that, even though officials may change, the institution of government decision making, respect for the rule of law and deference to prior governmental decisions pursuant to the rule of law will prevail. Subsequent governments may be hesitant to reverse or amend the high-level policy decision of a previous government. Moreover, where such decisions are motivated by basic conservation and social values to preserve important natural assets for present and future generations, subsequent governments may find it difficult to oppose this fundamental public interest unless the conditions have changed drastically.
- 35 There are other generic elements of protected areas legislation that help secure a decision to establish a protected area and maintain its status over the long term. These are related to universally accepted good governance principles (discussed further in section 4, below) that promote public participation, access to information, equity and justice for stakeholders in the decision-making process. Meaningful participation in protected areas establishment and management, and the equitable sharing of benefits and costs help build a constituency over the long term to monitor and sustain support for the area even when governments may change.
- 36 The majority of formal protected areas worldwide are on state-owned or state-controlled lands and waters where decision making and management are directly controlled by the government. However, as discussed further in Part II, new governance approaches are being developed and promoted to bring valuable communal or private conservation areas into formal protected area systems when the communities, corporations, NGOs or individuals involved choose to do so. Such voluntarily conserved areas must also satisfy the long-term conservation requirement to fit the IUCN-WCPA definition and thus to be recognized in the WDPA, as explained in the 2008 IUCN-WCPA guidelines:
- A land owner who manages for conservation today but makes no provisions for whether or not the management will continue into the future is certainly contributing to conservation but not through a recognized protected area (Dudley, 2008, p. 32).
- 37 The general requirements noted above, that all areas designated as formal protected areas should involve high policy-level designation and the meaningful participation of affected stakeholders, help advance the long-term commitment to voluntarily conserved areas as well. In addition, other legal tools specific to the particular features of voluntarily conserved areas are important for the long-term security of their designation. These features relate to the voluntary nature of the arrangement and the status of the lands, waters or resources involved, whether privately held or held collectively by local communities or indigenous peoples. Even where the lands or waters may be government or public areas, communities, corporations or individuals may have customary or statutory rights over use and management of the resources.
- 38 Because of these special features, additional legal tools need to be employed to ensure that all rights are clearly defined and all parties are fully committed. Among these is the need for legislation to provide that the land tenure rights of the entities involved are legally secure and recognized by statutory law, or by customary law in states where this system may provide secure title, so that commitments made can be carried out with legal certainty. In some cases, securing legal certainty with respect to specific rights over certain lands, waters or resources may be a community's precondition for making a long-

term commitment to conservation. A second important element is for the legislation to provide for a negotiated agreement recording the commitments being made, including the rights and responsibilities of all parties, based on the free, prior and informed consent of all involved.

It should be noted that some entities undertaking voluntary conservation initiatives may not be interested in or prepared to make the long-term conservation commitment required to meet the definition of a formal protected area. This decision should not diminish the important contribution such initiatives may make to the overall conservation goals of the country. Voluntary conservation efforts by communities, corporations and individuals may still play a valuable role in the protected areas system plan as buffer zones or ecological corridors serving connectivity functions for conservation (discussed further in section 3.1.3, below). Or they may support conservation functions across landscapes and seascapes in general. In many cases, a short-term arrangement may provide a trial period to test relationships and commitments, and serve as a stepping stone to a longer-term commitment.

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3 Management principles with legal application

This section reviews several best practice management principles for protected areas, recognized by the international conservation community as key elements for effective protected areas establishment, management, monitoring and evaluation. These principles continue to be elaborated as scientific understanding and experience grow about the needs of protected areas and standards of management on the ground, including areas needing legal support. As noted in the introduction to these protected areas legislation guidelines, some of the most comprehensive treatment of best practice management principles and related guidance relevant for this discussion comes from IUCN programmes and commissions including, in particular, IUCN-WCPA.

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The principles reviewed in this section have been selected specifically because they need to be supported by and incorporated, subject to local legal practice, into contemporary protected areas legislation.

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3.1 System planning

System planning is an organized way to carry out conservation planning for protected areas at the macro level. It is recognized as a key management principle for effective nature conservation.

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When system planning is applied to protected areas, it aims to maximize the desirable characteristics of a national protected areas system. As explained by IUCN-WCPA (Davey, 1998, p. 10), system planning in relation to protected areas is about:

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- (a) defining the priority of protected areas as a worthwhile national concern;
- (b) defining the relationships between different units and categories of protected areas, and between protected areas and other relevant categories of land or sea;
- (c) taking a more strategic view of protected areas;
- (d) defining roles of key players in relation to protected areas and the relationships between these players; this may include building support and a constituency for protected areas;
- (e) identifying gaps in protected area coverage (including opportunities and needs for connectivity) and deficiencies in management; and
- (f) identifying current and potential impacts—both those affecting protected areas from surrounding land or sea, and those emanating from protected areas which affect surrounding land or sea.

- 44 The 2008 IUCN-WCPA guidelines emphasize that the “overall purpose of a system of protected areas is to increase the effectiveness of *in-situ* biodiversity conservation” (Dudley, 2008). As such, a system approach aids in understanding the role of an existing site in fulfilling national biodiversity goals, so that management objectives can be designed for that role. It is also important for filling gaps in coverage in order to more adequately represent the full range of biodiversity and other features of natural and cultural value in the country. Taking a system approach to planning has the added benefit of opening the process to new governance types in cases where high-value areas may be situated on non-state lands and managed for conservation by indigenous peoples, local communities or private landowners.
- 45 System planning is also recognized by conservation scientists as a critical step for protected areas to be as resilient as possible to projected climate change impacts. An important initial step for climate change adaptation is to build a representative network of protected areas free from other stresses (Dudley et al., 2010; Welch, 2005). This means undertaking a gap analysis and developing a plan that fills existing gaps in coverage to represent biodiversity values as fully as possible. It also means designing new sites with a view to their adaptability and resilience to future impacts, and ensuring that management is effectively reducing present non-climate threats such as pests, invasive alien species (IAS) and illegal extraction, which will weaken the ability of natural systems to adapt and adjust to climate change.
- 46 A system planning approach also helps to identify and understand external factors which may present immediate and long-range threats to conservation. Many of the protected areas that exist today were created on an ad hoc basis as specific opportunities arose to acquire lands or designate public lands and waters for conservation. As a result, the selection and management of a particular area was done in isolation from other areas, and there was no ability to plan and designate sites based on their contribution to overall biodiversity conservation goals or their sustainability in the face of surrounding activities. The case-by-case approach left some protected areas as isolated islands unable to sustain their conservation objectives because of severe external threats.
- 47 System planning is consistently endorsed in international law and policy. The CBD requires countries, as far as possible and as appropriate, to “establish a system of protected areas or areas where special measures need to be taken to conserve biodiversity” (Art. 8(a)). In 2003, to advance fulfilment of this obligation, the Vth IUCN-WPC in the Durban Action Plan called on protected areas authorities to develop an overall plan for their protected areas within a framework based on biogeographical regions and in consultation with all relevant constituencies (IUCN-WPC, 2004, main target 5). The CBD Programme of Work on Protected Areas adopted by the Conference of the Parties in 2004 went a step further by providing concrete targets for shifting to a system approach, calling on countries to establish comprehensive and ecologically representative national and regional systems of terrestrial protected areas by 2010 and MPAs by 2012 (CBD COP 2004 VII/28, programme element 1).
- 48 While the concept of system planning started with terrestrial protected areas, there is now broad scientific consensus that a similar emphasis is needed with respect to MPAs. This is approached through the concepts of marine spatial planning and networks of MPAs. IUCN’s 2009 plan of action for MPAs focuses on marine ecosystem health, stressing that:
- networks of MPAs are vital tools to support marine ecosystem health. Networks of MPAs, within single ecosystems but spanning entire seas and ocean realms such as the High Seas, are necessary to ensure that biological connections are maintained between interdependent MPAs (Laffoley, 2008).
- 49 Modern legislative frameworks should provide a clear legal mandate for managing protected areas as part of a system. Over the years, IUCN-WCPA has developed guidelines on the main characteristics

of a protected areas system. These guidelines are intended to help managers assess individual sites for their actual or potential contribution to the system or network overall, as well as to other protected areas and the surrounding lands or waters. They emphasize several attributes to keep in mind with system planning provisions in protected areas legislation (see Box I-1).

Box I-1: Main characteristics of a protected areas system

IUCN considers that the main characteristics of a protected areas system should include:

- **Representativeness, comprehensiveness and balance:** ability to represent or sample the full variety of biodiversity and other features such as landform types, and landscapes or seascapes of cultural value, so as to protect the highest quality examples, especially threatened and under-protected ecosystems, and species globally threatened with extinction.
- **Adequacy:** supporting the viability of ecosystem processes as well as species, populations and communities that make up the country's biodiversity.
- **Coherence and complementarity:** the extent to which each site makes a positive contribution to the system as a whole.
- **Consistency:** the application of management objectives, policies and classifications to individual sites under comparable conditions in standard ways.
- **Cost-effectiveness, efficiency and equity:** an appropriate balance between the costs of and benefits flowing from protected areas, equity in their distribution, and efficiency in terms of the minimum number and size of protected areas needed to achieve system objectives.
- **Persistence:** the ability to promote the long-term survival of biodiversity contained within a protected area by maintaining natural processes and viable populations and by excluding or overcoming threats.
- **Resilience:** the ability to adapt and sustain primary conservation objectives of the site and the system overall in the face of climate change and other global change factors.

Source: Adapted from Barber et al., 2004; Davey, 1998; and Dudley, 2008.

3.1.1 Protected areas system plan

The starting point for a system approach to protected areas design and management is the protected areas system plan. The goal of a system plan is to achieve a comprehensive, adequate and representative system or network of ecologically viable protected areas that are well integrated with other land and aquatic uses. This could include protected areas established under other laws besides protected areas legislation, such as forestry, water resource management or land use laws, and areas with other governance types, such as community conserved areas and PPAs. 50

Protected areas legislation should require a national protected areas system plan, give guidance on its overall objectives, and specify who is responsible for its preparation and oversight. A system plan can provide the framework within which operational priorities and overall budgets and resources can be allocated and adjusted over time, trade-offs identified and monitored in biodiversity and socio-economic terms, interrelationships between protected areas addressed, and international obligations incorporated. 51

A protected areas system plan also makes it possible to consider ecological connectivity more fully. A system plan should identify buffer zones that may be needed. It should also identify ecological corridors linking protected areas in order to connect ecological processes, patterns of vegetation, habitats for threatened and vulnerable species, and other living resources within landscapes or seascapes. 52

As awareness has grown about climate change and its potential impact on protected areas, there is emerging agreement that a system plan should also address changing climate and its projected effects 53

on the protected areas of the system. The system plan is an effective way to make climate change a priority issue.

3.1.2 Ecosystem approach

- 54 **International guidance.** The ‘ecosystem approach’, as defined by the CBD, is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way (CBD COP 2000 V/6; CBD COP 2004 VII/11). As a recognized planning and management principle for protected areas, it is an important concept to incorporate in protected areas legislation. Promotion of this principle is based on the recognition that protected area systems and the units that comprise them should be integrated with surrounding landscapes and seascapes, and that land use plans and marine spatial plans for areas outside the protected areas system should also be ecosystem-based and be compatible with the conservation objectives of the protected areas system.
- 55 The ecosystem approach involves societal choices. Interested and affected communities must be involved to ensure that policy and planning decisions are fair and equitable. Local communities and indigenous peoples also have special knowledge of the local ecosystems on which they depend, and can provide important input for effective ecosystem management.
- 56 The Vth IUCN-WPC in 2003 formally adopted the ecosystem approach for protected areas. It recommended that the governance of “protected areas should be in keeping with the Ecosystem Approach” as defined by the CBD (IUCN-WPC 2003 V.9; IUCN-WPC 2003 V.16). In conjunction with the target to have in place a system of protected areas representing all the world’s ecosystems by the next WPC (2013), the Vth IUCN-WPC stressed in the Durban Action Plan that this means setting protected areas within a wider matrix of ecosystem-based, environmentally sensitive land and water management, supported by mainstreaming environmental considerations into various areas of public policy (IUCN-WPC 2004, main target 4).
- 57 Soon thereafter, the CBD Programme of Work on Protected Areas reinforced the concept for national and transboundary application, as follows:
- The Convention’s work on protected areas takes into account the ecosystem approach... The ecosystem approach provides a framework within which the relationship of protected areas to the wider landscape and seascape can be understood, and the goods and services flowing from protected areas can be valued. In addition, the establishment and management of protected area systems in the context of the ecosystem approach should not simply be considered in national terms, but where the relevant ecosystem extends beyond national boundaries, in ecosystem or bioregional terms as well (CBD COP 2004 VII/28, para. 8).
- 58 The concept has been extended to marine environments and oceans. The WSSD Plan of Implementation promotes integrated multi-sectoral coastal and ocean management at the national level (UN, 2002, para. 30). In recent resolutions, the UN General Assembly has called upon states to apply the ecosystem approach to conserve marine biodiversity, and to cooperate in areas within and beyond national jurisdiction, taking into account the integrity of the ecosystems concerned (UN, 2009).
- 59 Other instruments of international law and policy also call for integrated approaches to landscape and seascape conservation and management. For example, the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), concluded in 1971, was one of the first international treaties to call for compatible land use planning in the context of wetlands protection (see discussion in section 5.1, below, on global conventions).
- 60 UNESCO’s Madrid Action Plan for Biosphere Reserves calls for use of the ecosystem approach and other tools to achieve cooperative conservation and development strategies for biosphere reserves (UNESCO, 2008a, p. 19). The Global Environment Facility, particularly through its support for ‘large

marine ecosystem' projects, as well as the Food and Agriculture Organization of the UN (FAO), United Nations Development Programme (UNDP), and UNEP, also promote the application of the ecosystem approach.

Benefits of approach. Conservation scientists and protected area managers have recognized that, to be most effective, conservation planning requires a large-scale perspective—entire ecosystems, bioregions and ecologically functioning landscapes and seascapes. The ecosystem approach provides an appropriate scale for determining priority biodiversity sites and ecological functions needing protection, as well as for selecting sites, setting boundaries and defining management needs. It facilitates a more relevant assessment of the social, political and economic context of threats to biodiversity and nature conservation, opportunities to mitigate them, and a framework for cross-sectoral and multi-jurisdictional partnerships to address complex conservation issues.

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Well-designed, comprehensive protected area systems representing diverse ecosystems also contribute to broader sustainable development goals by protecting and maintaining ecological processes critical for well-functioning ecosystems and economies, and by helping to buffer and overcome threats to ecosystems. In addition, protected areas have high value as ecological baselines to help scientists and managers understand the functioning of ecosystems and biotic communities where human impacts are minimized or excluded. This knowledge is important for managing the system and also for guiding sustainable development plans outside protected areas. Furthermore, this understanding will be increasingly valuable for designing adaptive responses and building the resilience of ecosystems in the face of climate change.

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Importantly, the ecosystem approach also calls upon protected areas authorities to work collaboratively at the landscape or seascape scale, to maximize the conservation of core protected areas through buffer zones, connectivity corridors or other land and marine conservation tools. A biodiversity synthesis report produced as part of the Millennium Ecosystem Assessment strongly endorsed this approach, finding that:

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[protected area] systems are most successful if they are designed and managed in the context of an ecosystem approach, with due regard to the importance of corridors and interconnectivity of [protected areas] and to external threats such as pollution, climate change, and invasive species (WRI, 2005, p. 10).

3.1.3 Buffer zones and connectivity conservation

Buffer zones surround core protected areas and serve to buffer or shield the protected area from the direct impact of human activities adjacent to the area. 'Connectivity conservation' is emerging as the generic term for various connectivity functions for conservation, including such terms as 'ecological corridors' and 'environmental corridors'. The concept is being broadened as scientists gain understanding about the many functions that need to be connected for protected areas to survive and fulfil their conservation objectives. These functions include connecting ecological processes and species habitats—the common application of the corridor idea. In addition, scientists are better understanding that connectivity functions are also important for connecting landscapes and seascapes for aesthetic or other purposes, and to permit gene flow and species range expansion (known as evolutionary connectivity) (Worboys et al., 2010).

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Connectivity conservation as a protected areas management principle began to appear in law and policy in the 1980s as conservation scientists continued to stress that protected areas could not survive as isolated islands outside the larger landscapes and seascapes of which they were a part. Loss of ecological and species connectivity across individual protected areas was leading to further decline in biodiversity within and outside the formal protected areas system.

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- 66 The CBD recognizes this link between sustainable protected areas and the broader landscape and seascape. In Article 8, the Convention calls upon Parties to set up a system of protected areas to “promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings” (Art. 8(d)), and to “promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas” (Art. 8(e)). The CBD Programme of Work on Protected Areas, adopted in 2004, goes further by setting a target for broad integration of all protected areas into their wider landscape and seascape, as follows:
- By 2015, all protected areas and protected area systems are integrated into the wider land- and seascape, and relevant sectors, by applying the ecosystem approach and taking into account ecological connectivity and the concept, where appropriate, of ecological networks (CBD COP 2004 VII/28, programme element 1).
- 67 The Vth IUCN-WPC emphasized connectivity in the context of the ecosystem approach to protected areas planning and management. The Durban Action Plan adopted by the Congress explains:
- few protected areas will ever be large enough to include entire ecosystems, and all protected areas—however big—will be affected by developments beyond their borders. [...] Yet many protected areas are cut off from the surrounding environment, where land uses and economic activities are planned without regard to the effect on the protected area, ignoring the movement of species, nutrients and other environmental flows across boundaries. To address this, an ecosystem or landscape-scale approach to protected areas planning is needed. This requires a conceptual move from protected areas as ‘islands’ to protected areas as parts of ‘networks’ (IUCN-WPC 2004, main target 4).
- 68 In line with this finding, participants of the Vth IUCN-WPC called upon governments to “adopt design principles for protected areas which emphasize linkages to surrounding ecosystems and ensure that the surrounding landscapes are managed for biodiversity conservation” (IUCN-WPC 2003 V.9, para. 1(b)). In addition, it is increasingly recognized that fragmented protected areas, without effective buffers and adequate connecting corridors, may severely limit possibilities for species to migrate and maintain populations, particularly in the face of projected climate change impacts (discussed further in section 3.6, below).
- 69 In some jurisdictions, protected area systems are designed so that some buffer zones and connecting corridors are formal protected areas within the system. This is the case, for example, with the Baekdu Daegan Mountain System in South Korea, a biological corridor 684 km long covering 263,427 hectares, where 83 legally designated protected areas serving as core and buffer zones make up 70 per cent of the total area (see the Baekdu Daegan case study accompanying these guidelines: Miller and Kim, 2010). In most jurisdictions, however, buffer zones and connectivity corridors are generally not formal protected areas even though they may be identified as part of the protected areas system. In such cases, the areas are commonly governed by other environmental or land use laws, although in some cases the protected areas legislation may also give protected area authorities certain powers over these sites (as illustrated in the Philippines protected areas legislation case study; see La Viña et al., 2010).
- 70 In general, laws relating to land use planning and environmental impact assessment (EIA) are important tools to protect the buffer zones and connectivity conservation areas identified in protected area system plans. Increasingly, the concept of ecological corridors and networks is being incorporated in nature conservation legislation as well as other supporting laws as a tool to address the connectivity issue. A survey of national legislation undertaken by IUCN in 2007 found a variety of ways countries are incorporating connectivity in legislation (see Table III(1)-2 in Part III, Chapter 1). France provides an example of a country that incorporates corridors and other supportive conservation practices in land use planning legislation (see Box III(1)-9 in Part III, Chapter 1).

A large-scale application of the concept of ecological networks is the European Community's Pan-European Ecological Network, a transnational network which member states implement through their domestic legislation (discussed further in Part IV, section 3.6). 71

3.2 Management by conservation objectives

Protected areas legislation should reflect the principle that management of a specific protected area should be in accordance with the goals and objectives for which the site was designated. The priority goal, according to the IUCN definition, is conserving nature. This is the fundamental justification for setting up protected areas and protected area systems. As noted earlier, 'nature' *always* refers to biodiversity, and often *also* to geodiversity, landforms and broader natural values. This was elaborated at an IUCN protected areas conference in Almeria, Spain, in 2007, as follows: 72

The concept of biodiversity includes the structural elements, such as genes, species, communities, and ecosystems (and landscapes), and the ecological processes that link all elements in a dynamic and ever changing state. The interaction of the structural elements within their ecological complexes produces ecosystem goods, including renewable resources (e.g., foods, fibres, medicines, wood, etc.) and the ecosystem services (e.g., clean air and water, climate regulation, nutrient cycling, etc.) on which we depend (Boitani and Rondinini, 2008).

In this context, protected areas legislation should provide that the overall priority goal of a protected areas system and the sites that comprise that system is nature conservation. In addition, more specific conservation objectives should be defined for each site based on the values and attributes for which the site is being designated as part of the formal protected areas system or network (Dudley and Stolton, 2008; Worboys et al., 2005). This is necessary because the system goal is normally too general to guide the management of individual sites. 73

Modern protected areas legislation should provide that each proposed site has clear and specific conservation objectives to guide site-specific management planning and actions. Where information is available, a statement of conservation objectives for the proposed site should include measurable targets that can be achieved within a stated period of time (Worboys et al., 2005). This provides a basis for evaluating the effectiveness of the management plan, actions taken over that period for purposes of accountability of the managing entities, and whether resources and capacity are adequate. 74

The authority responsible for a specific protected area should be guided by the goals of the protected areas system as well as the priority conservation objectives for the site. These goals and objectives serve as the basis for assigning the site a protected area management category and developing the site management plan. 75

3.2.1 Protected area management categories

Another best practice management principle is the use of a range of protected area categories, grounded in law, for managing sites according to their conservation objectives. The categories provide a framework, from strict protection to multiple use, which can be applied to the entire protected areas system, even though some sites may be established under other legislation and may also have other classifications (for example, a forest protected area, an indigenous or traditional peoples' conserved area). The protected areas system should recognize and incorporate objectives equivalent to IUCN categories I to VI in order to "create a landscape-seascape matrix of protected areas with varying uses and emphasis" (Bakarr and Lockwood, 2006, p. 218). Experience suggests that a protected areas system is best served and in-situ (on-site) conservation is most effective when the categories used, 76

whatever the framework, reflect the full range of conservation objectives relevant for the country's needs overall.

- 77 Since 1994, IUCN has offered a set of categories as guidelines for governments establishing and managing protected area systems, to help translate conservation objectives into management actions. The categories span a range of conservation objectives from strict nature reserves and wilderness areas (categories Ia and Ib) to managed resource protected areas (protected areas with sustainable use of natural resources) (category VI). Each category is suited to particular objectives and needs, and each is capable of contributing to national biodiversity conservation goals. Each also offers different potential for managing the interactions between protected areas and communities, and for providing ecosystem services and biodiversity conservation, so the benefits of different categories to the country will vary. In addition, it is intended that units in the system falling under one category will support those in other categories and that each unit will be planned in conjunction with units in other categories in order for the protected areas system to function effectively within the categories framework (Davey, 1998).
- 78 The definition of these categories by management objective is elaborated in the 2008 IUCN-WCPA guidelines for applying protected area management categories (Dudley, 2008) (see Table I-2). The 2008 IUCN-WCPA guidelines expand upon each individual category, specifying the primary objective, other objectives, distinguishing features, role in the landscape or seascape, what makes the category unique, and issues for consideration. The legal drafter and protected area authorities are encouraged to review these expanded sections as they design their own protected areas legal framework, standards and guidelines.
- 79 Use of the protected area management categories has grown since the categories were first laid out by IUCN in the early 1990s. Since then, most countries have begun to apply or use the categories as a management tool in some if not all of their protected areas.
- 80 Since 2004, the CBD has formally recognized the IUCN category system as a tool that countries should use in reporting progress on establishing and maintaining protected area systems. This guidance was provided in 2004 by a decision of the CBD Conference of the Parties which adopted the Programme of Work on Protected Areas. The Conference of the Parties recognizes:
- the value of a single international classification system for protected areas and the benefit of providing information that is comparable across countries and regions and therefore *welcomes* the ongoing efforts of the IUCN World Commission on Protected Areas to refine the IUCN system of categories and *encourages* Parties, other Governments and relevant organizations to assign protected-area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes (CBD COP 2004, VII/28, para. 31).
- 81 The Ninth Meeting of the Conference of the Parties in Bonn, Germany, in 2008 reaffirmed and incorporated verbatim this 2004 decision, once again encouraging “Parties, other Governments and relevant organizations to assign protected-area management categories to their protected areas, providing information consistent with the IUCN categories for reporting purposes” (CBD COP 2008 IX/18, para. 9).
- 82 In addition, the IUCN categories are also being recognized in protected areas law and policy (Bishop et al., 2004). A 2003 survey by IUCN found that some 10 per cent of national legislation as of that year was using the IUCN categories (see Box I-2). IUCN considers that the categories provide an important global standard for planning, establishing and managing protected areas. However, it recommends that governments first set out the framework of categories most appropriate for their needs, consistent with the overall protected areas definition, and then look to the IUCN categories for

guidance and application. In that context, many governments find that the IUCN categories provide a useful framework for developing their own national protected area categories.

Table I-2: IUCN protected area categories

Category	Definition by management objectives
Category I a: Strict nature reserve	Strictly protected areas set aside to protect biodiversity and also possibly geological or landform features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of conservation values. Such protected areas may serve as indispensable reference areas for scientific research and monitoring.
Category I b: Wilderness area	Protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
Category II: National park	Protected areas are large natural or near-natural areas, set aside to protect large-scale ecological processes along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.
Category III: Natural monument or feature	Protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.
Category IV: Habitat/species management area	Protected areas aim to protect particular species or habitats, and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
Category V: Protected landscape/seascape	A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value, and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.
Category VI: Protected area with sustainable use of natural resources	Protected areas that conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.
<i>Source: Dudley, 2008, pp. 13–23.</i>	

Applying the IUCN categories. It is important to begin by recalling that the IUCN protected area management categories only become relevant considerations for a protected area when it meets the IUCN definition of a protected area. Once that has been determined, decisions can be made about the category most appropriate for a particular site. This involves two preliminary considerations. First, the IUCN categories are commonly referred to by the number that each category is assigned (in other words, category Ia to VI), rather than by name. This allows countries to continue applying their own terminology to sites (for example, national parks, wildlife sanctuaries), based on local preferences and tradition, and still use the common framework of conservation objectives for international reporting. So decisions about which category may apply should focus on the substantive purpose and conservation value of the site to be protected, not on the local terminology that may be used.

Second, the category assigned to a particular site should be based on the primary objective of the site. Most protected areas will have multiple objectives and values. The authority responsible for a particular protected area may have to decide which is the primary objective among many objectives in order to properly assign a protected area category. The 2008 IUCN-WCPA guidelines have added a suggestion that authorities consider the '75 per cent rule', in other words, that the primary objective

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should apply to at least three quarters of the protected area (Dudley, 2008, p. 35). This rule could apply to an individual protected area zoned into different management categories, or to a cluster of protected areas where the individual areas or zones have themselves been defined by legislation. The 75 per cent rule is particularly helpful guidance in the case of large-scale, multiple-use sites such as MPAs which may include many zones, including zones for the sustainable use of fisheries (discussed further in Part III, Chapter 2).

Box I-2: Use of the IUCN protected area management categories in law and policy

IUCN initiated the Speaking a Common Language project in the 1990s to assess the performance of the IUCN protected area management categories and report back by roughly 2004, some 10 years after the system had been established. One component of the project focused on use of the categories in law and policy. IUCN's Environmental Law Centre (ELC) was asked to research legal and policy frameworks for protected areas to see whether these have been influenced by the IUCN system of protected area management categories.

In 2002–2003, ELC undertook research on the topic, identifying 20 countries whose national legislation quotes the IUCN protected area management categories or uses very similar categories. Of the 322 pieces of national legislation included from 164 countries, 7 per cent of the national legislation either specifically quoted the IUCN categories or used very similar categories. For national legislation developed after 1994, that overall figure increased to 10 per cent. According to the study, “[in] most cases the categories proved to be a good starting point for discussion, and appeared to provide ground rules and a good framework to begin reviewing or developing legislation or policy for protected area systems” (Dillon, 2004, p. 19). Results also suggested that countries used the IUCN categories in national policy more than in legislation.

The study and its findings are described in Dillon, 2004. The full study was produced as a working paper, entitled ‘Influence of IUCN Protected Area Management Categories on National, Regional and International Legal and Policy Frameworks’ (IUCN-ELC, Bonn, Germany, January 2003).

- 85 The 2008 IUCN-WCPA guidelines offer additional aids for applying the categories (Dudley, 2008). In particular, any category can exist with any governance type and any category may apply in the marine environment as well as in the terrestrial environment, as long as the general protected areas definition is met. In addition, while all categories are of equal importance (in other words, the system is not hierarchical), levels of protection and human intervention will vary from little or no intervention for categories providing high levels of protection (categories I to IV) to extensive intervention for categories with more environmental modification and multiple-use purposes (categories V and VI).
- 86 This means that not all categories are equally suitable in every situation. For example, category V is probably not suitable for application in a pristine, endangered ecosystem. This point on the application of the categories marked a critical change of view by protected area professionals meeting at the 2007 IUCN conference on defining protected areas in Almeria, Spain (Dudley and Stolton, 2008).
- 87 Today the IUCN categories system is considered the international system. The WDPA uses the IUCN categories system to record both terrestrial and marine national protected areas. It also records areas where the IUCN category is not known. As noted in the introduction to these protected areas legislation guidelines, the WDPA is used to compile the UN List of Protected Areas. According to UNEP-WCMC, “the value of the category system reinforces the need to achieve the goal of progressively assigning all relevant sites to an IUCN category” (UNEP-WCMC website). At the same time, it is important to keep in mind that assigning a category to a site that is then recorded in the WDPA is not a commentary on the effectiveness of the management of that site.
- 88 **Key principles.** Drawing from the above discussion, key principles for the use of IUCN categories in law and policy may be summarized as follows:
- (a) the choice of category should be based on the primary conservation objectives stated for each protected area;

- (b) assignment of a category is not a commentary on the effectiveness of management;
- (c) the category system is international;
- (d) terminology employed for protected areas may vary, so reporting is by category number;
- (e) all categories are important (in other words, the system is not intended as a hierarchy);
- (f) levels of human intervention will vary by category, from no or limited intervention to greater modification;
- (g) not all categories are equally suitable for every situation.

Lessons learned. The 2008 IUCN-WCPA guidelines point out a number of lessons learned over the years on use of the categories in the context of protected areas law and policy. These include the following:

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- (a) The categories have significant potential to influence protected areas policy and legislation at all levels, and the level of application has greatly accelerated since publication of the 1994 guidelines.
- (b) It is anticipated that the relative importance of the categories system in influencing policy decisions will increase, particularly at the national level, as the CBD Programme of Work on Protected Areas is more widely and effectively applied.
- (c) The advantage of including the categories system in policy-level decisions is that it gives the system extra weight and credibility, and can enhance awareness and understanding of the values of protected areas (Dudley, 2008, pp. 48–49).

The IUCN protected areas categories are incorporated into the generic elements for protected areas legislation in Part III.

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3.3 Management plans

The protected areas system plan discussed in section 3.1.1, above, covers the national or macro level. An associated best practice management principle with legal application is the need for all terrestrial and marine protected areas designated as part of the formal system to be covered by a management plan. Such a plan guides actions and directs resources within the boundaries of a protected area, consistent with and in furtherance of its conservation objectives. Modern protected areas legislation, in response to best management practice and international policy and guidelines, includes the requirement for a protected area management plan to give managing authorities a clear legal mandate for allocating resources and for preparing the plan following a common framework.

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IUCN defines a management plan for a protected area as follows:

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a document which sets out the management approach and goals, together with a framework for decision making, to apply in the protected area over a given period of time. Plans may be more or less prescriptive, depending upon the purpose for which they are to be used and the legal requirements to be met. The process of planning, the management objectives for the plan and the standards to apply will usually be established in legislation or otherwise set down for protected area planners (Thomas and Middleton, 2003).

International guidance. At the international level, law and policy give formal recognition to the management plan as a required tool for effective protected areas management. Most significantly, the 2004 CBD Programme of Work for Protected Areas recognizes the need for management plans to improve site-based protected area planning and management, and sets forth the following target:

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All protected areas to have effective management in existence by 2012, using participatory and science-based site planning processes that incorporate clear biodiversity objectives, targets, management strategies

and monitoring programmes, drawing upon existing methodologies and a long term management plan with active stakeholder involvement (CBD COP 2004 VII/28, goal 1.4).

It also advises Parties to develop or update their management plans for protected areas, as appropriate, to better achieve the objectives of the Convention (CBD COP 2004 VII/28, para. 1.4.4).

94 The Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972), through its Operational Guidelines, requires an effective management plan or other documented management system to be in place for natural and cultural sites nominated or designated as world heritage sites (UNESCO, 2008b). The Operational Guidelines also identify several common elements for an effective management plan or system, which are instructive for their legislative implications (UNESCO, 2008b, para. 111):

- (a) a thorough shared understanding of the property by all stakeholders;
- (b) a cycle of planning, implementation, monitoring, evaluation and feedback;
- (c) involvement of partners and stakeholders;
- (d) allocation of necessary resources;
- (e) capacity building; and
- (f) an accountable, transparent description of how the management system functions.

95 The UNESCO MAB Programme requires a management plan or policy for areas that are recognized as part of the UNESCO World Network of Biosphere Reserves. Within the European Union (EU), the Habitats Directive (1992), which focuses on the conservation of natural habitats of wild fauna and flora, calls upon Member States to apply appropriate management plans, specific to the sites or integrated into other development plans.

3.3.1 Key management plan elements for legislation

96 A number of best practice management principles require consideration within protected areas legislation. These relate to plan content, the process of preparation, legal status and issues of implementation. These elements are dealt with in some detail in several publications, including three comprehensive IUCN reports from which much of the discussion below is drawn (Lockwood et al., 2006; Thomas and Middleton, 2003; Worboys et al., 2005). Part III, Chapter 1, section 6, translates these considerations into generic elements for protected areas legislation.

97 **Content of plan.** There is no standard format for a management plan. However, international guidelines identify several key components which are normally included in principal legislation or subsidiary legislation, depending on local legal practice. These include:

- (a) legal description of the area and how it relates to the system plan;
- (b) protected areas authority in charge and other important governance arrangements;
- (c) basic description of the resources and conservation values for which the area is being designated, and related human interactions intended to be permitted in the area;
- (d) conservation objectives and management category for the area;
- (e) principal threats and management approaches for dealing with them;
- (f) zoning plan, as needed;
- (g) kinds of activities permitted and prohibited in the area;
- (h) monitoring plan;

- (i) performance criteria for evaluating progress toward goals and objectives, and effectiveness of specific management approaches;
- (j) life of the plan and basic cycle for review, revision and updating.

The format of a plan and the weight given to particular elements will vary in response to the specific resources and values of the protected area, as well as management capacity and governance approach. Where the protected area is large and multi-purpose, the plan may be divided into several programme or action plans, each addressing specific functions, for example, conservation, sustainable use, scientific research, monitoring, education, recreation, regulatory aspects, administration and coordination. These functional programmes or action plans normally identify the specific objectives, management actions and resource needs relevant for the area, and collectively comprise the protected area management plan. 98

Process of plan preparation. Again, there is no consensus among planners as to the best approaches or processes for producing a management plan. There are, however, certain generic planning steps and these may be reflected in legislation to provide a common approach across protected areas. At the pre-drafting stage, it is necessary to establish participatory mechanisms for the public and stakeholders, collect relevant data, and identify and assess issues and problems, broad goals, conservation objectives, zoning needs, and management actions including regulatory actions and priority activities. These analyses become the basis for preparing the draft management plan. Once a draft plan has been prepared, the process involves further public consultation, revision of the draft plan, production of a final plan, formal approval of the plan at the highest policy level, implementation, monitoring, and review and updating after a given period of time. 99

Legal status of plan. In addition to the legal requirement for a management plan, an important consideration for protected areas legislation is to be clear about the legal status of the management plan once it has been approved. The plan should have sufficient legal standing to provide the necessary powers to the protected areas authority to manage the area, including allocating budget resources, consistent with the protected area management category and conservation objectives. Giving the plan legal effect is also important to ensure that other sectors and levels of government are fully informed about the plan, respect the legal status of the plan, and undertake their activities in a manner consistent with the plan. 100

An approved management plan commonly becomes the basis for the protected areas authority to exercise powers, undertake actions and assume responsibilities necessary for effective plan implementation. These powers and responsibilities include the authority to prohibit or otherwise regulate activities in the protected area or in specific zones, consistent with the plan. Many elements of a management plan may not have regulatory content, for example, education, research, monitoring or outreach. However, elements related to the control of activities within the protected area or in particular zones will necessarily have regulatory content and implications. This requires that the protected areas legislation be clear that the management plan has sufficient legal status to serve as a framework or foundation to trigger regulatory action. The legal status awarded to the plan should also be sufficient to pursue compliance and enforcement measures in accordance with applicable law, and should be able to withstand judicial review. 101

Implementation considerations. Normally, a management plan sets out actions to be implemented. These should be realistic and necessary for management of the area according to its objectives. The following considerations are also relevant to cover in legal provisions laying out requirements for a management plan: 102

- **Feasibility.** The plan should not be a wish list or include items that are not necessary to meet management objectives. It should be prepared giving attention to financial feasibility, the operational capacity of the implementing authority, enforcement ability and even issues of political stability. The plan should identify clear imperatives and priorities so that resources are directed to the most important needs of the protected area. Overall, the management plan must assess the feasibility of the requirements it contains, including legal enforceability, and support necessary actions with complementary tools such as education, outreach and incentives to enhance the effectiveness of compliance.
- **Flexibility.** The amount of detail in the plan must be balanced with sufficient flexibility to allow for effective day-to-day management. A management plan should not cover all aspects of operational and financial planning. Flexibility is needed to address normal operational and resource adjustments in response to unplanned or unanticipated events. The natural environment is a dynamic living system and protected areas are part of this system. Protected areas in both terrestrial and marine environments are surrounded by other uses that may have unplanned impacts on the protected area from time to time and require rapid response. Other administrative tools such as contingency plans, business plans and site plans for high-use sites can provide more detailed guidance in order to preserve flexibility in the management plan.

3.3.2 Adaptive management

- 103 Adaptive management is not a new concept. In the context of conservation, it is an approach to planning and management that has been in use for more than two decades (Barber et al., 2004). Adaptive management for protected areas involves adjusting management practices based on constant learning and analysis about how the natural environment and species respond to and are impacted by changing environmental conditions, surrounding land and resource uses, and the broader socio-economic systems within which they exist. It is a management tool that involves a social process as well as a scientific one and must focus on institutional issues as much as scientific frameworks. To use management in this way for protected areas requires a supportive policy and legal framework.
- 104 There are two applications of adaptive management that are important to distinguish for protected areas legislation. First are those day-to-day decisions that protected area managers take to accommodate changing conditions and unanticipated events in the near-term. This application of adaptive management has been a long-standing operational tool for protected area managers. Most management decisions under the first application fit within the scope and authority already provided in the management plan. To highlight the need for plan development to take into account adaptive management considerations, the legislation should require or enable the defining of inner zones, where feasible, so as to build resilience and flexibility for anticipated species and ecosystem shifts, consistent with the primary conservation objectives of the site. In addition, provisions on management plans should include essential elements but be cautious about going into so much detail on required content that the plan loses the flexibility needed to accommodate reasonable management adaptations.
- 105 The second situation where the concept of adaptive management has relevance for protected areas legislation relates to the longer-range and more gradual environmental changes that protected areas face over time, due to natural and human factors including global change factors. Adaptive management under these circumstances may call for management responses that go beyond the framework and authority of the existing management plan and may even, in some cases, require consideration of boundary changes to accommodate species or ecosystem shifts. To the extent that longer-range issues (for example, shifting species, IAS threats) can be reasonably foreseen, it may be possible to design the protected areas system and specific sites for redundancy and for resilience to future threats.

Legislative provisions on system planning should emphasize the importance of building redundancy into the system by selecting more than one representative site where feasible. At the same time, adaptive management decisions that require boundaries or protected area categories to be changed would still need to follow the relevant legislative controls and processes. In other words, amending legal boundaries and changing protected area categories would require public consultation and formal high-level policy approval as laid out in the protected areas legislation. 106

Adaptive management in response to climate change is discussed in section 3.6, below, and boundary issues with respect to climate change are discussed in Part III, Chapter 1, section 6.5. 107

3.4 Precautionary approach

The precautionary principle is important to recognize in protected areas legal frameworks for decision making about the design and management of protected areas. The precautionary principle provides that where knowledge is limited and there is lack of certainty regarding the threat of a serious environmental harm, this uncertainty should not be used as an excuse for not taking action to avert that harm. As such, it provides a fundamental policy basis to anticipate, avoid and mitigate threats to the natural environment. Use of the precautionary approach in conservation and sustainable use decision making is becoming increasingly important today because decisions about the protected areas system and specific sites may have to deal with uncertainty and complexity, particularly about future global forces such as climate change and IAS. 108

The principle has been recognized in international law and policy since the 1970s. It began to receive widespread attention when included in the Rio Declaration on Environment and Development (1992) (principle 15). 109

Several multilateral environmental agreements on biodiversity conservation include references to the precautionary principle in some manner. For example, the CBD incorporates the precautionary principle in its preamble, as follows: “where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.” The CBD and several agreements under the Convention on the Conservation of Migratory Species of Wild Animals (CMS) (1979) also emphasize the need to apply the precautionary principle with respect to the introduction, spread and control of IAS. 110

The United Nations Convention on the Law of the Sea (UNCLOS) (1982) incorporates precautionary obligations with respect to preventing marine pollution or other harm to the marine environment. Similarly, Article 3(3) of the United Nations Framework Convention on Climate Change (1992) states: 111

The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

At the regional level, the revised African Convention on the Conservation of Nature and Natural Resources (2003) contains a strong statement on use of the precautionary approach as a fundamental obligation (Art. IV).

In 2004, IUCN published an issues paper on the precautionary principle in biodiversity conservation (Cooney, 2004) for use by policy makers, researchers and practitioners. This was followed by IUCN Guidelines for Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management (IUCN-WCPA, 2007b). To apply the precautionary principle effectively, the first guideline 112

of the 2007 publication is to “incorporate the Precautionary Principle explicitly into appropriate legal, institutional and policy frameworks” (IUCN-WCPA, 2007b, p. 5). This is elaborated as follows:

Application of the principle requires a clear legal and policy basis and an effective system of governance. It also requires the establishment and maintenance of adequately resourced institutions to carry out research into risk and uncertainty in environmental decision-making and natural resource management (IUCN-WCPA, 2007b, p. 6).

- 113 The IUCN precautionary principle guidelines also identify several supporting guiding principles for effective implementation of the precautionary principle. These highlight the importance of incorporating certain core elements in protected areas legislation, and include (IUCN-WCPA, 2007b):
- **Broad participation:** including all relevant stakeholders and rightsholders in a transparent process of assessment, decision making and implementation as input for making the best possible judgements about overall risks, threats and required actions, particularly where there is uncertainty. The imperative of including key stakeholders should, however, be balanced against potential conservation costs of delaying a decision (guideline 4).
 - **Best available science and other information:** using the best available information, including best available scientific understanding of threats, related human influences and drivers of threats, along with traditional and indigenous knowledge, to characterize the threat, assess options and measures for addressing the threat, and assign roles and responsibilities (guideline 5).
 - **Adaptive management:** using an adaptive management approach, particularly important in the face of current and potential future environmental uncertainties, including from new factors such as climate change, where ongoing monitoring, regular review and flexibility are essential elements of the decision-making process, so that new knowledge and understanding can be incorporated as improved data and research findings become available (guideline 12).

3.5 Managing for invasive alien species

- 114 The threat of IAS is the second most significant problem for global biodiversity after habitat loss, and in island nations this threat ranks first. Specifically with respect to protected areas, the CBD joined with The Nature Conservancy (TNC) and IUCN-WCPA in 2009 to produce a guide on invasive species, for use by protected area practitioners, in which IAS was defined as follows: “An alien species that is able to survive and reproduce or spread outside of human intervention/cultivation and whose introduction and/or spread has a negative impact on biodiversity or ecological functions within a Protected Area” (Tu, 2009, p. 38).
- 115 In 2002, the CBD concluded that risks to biodiversity from IAS “may be increasing due to increased global trade, transport, tourism and climate change” (CBD COP 2002 VI/23, para. 1). Research undertaken for the 2009 IAS guide confirmed that “[r]apid increases in global trade and travel are enabling more animals, plants and disease to be transported from their native environments into new territories” (Tu, 2009, p. 6).
- 116 Worldwide, IAS present serious risks to economies and communities by altering ecosystems and the services on which communities depend, impacting tourism, and spreading diseases to people, domestic animals and plants. For this reason, most countries have broad-based laws and programmes in place to prevent intentional or accidental introduction of IAS, and to control or mitigate the damage from IAS, whether non-native wildlife, pests or pathogens. These general laws and programmes normally function by listing the main IAS that are prohibited from entry or that require permits (where research is involved). They are typically implemented through agencies in such sectors as public health or agriculture where impacts are generally most immediately detectable, or by agencies overseeing

the main entry pathways, such as shipping, aviation, tourism, commercial imports and the pet trade.

Tools for prevention and control covered by general IAS legislation normally include quarantine, border and transit checks, regulating release of ship ballast water and hull fouling, international and inter-state information exchange, contingency planning, and emergency response. These general laws aimed at preventing or controlling the introduction of IAS into a country are essential underpinnings for preventing and controlling IAS introduction into a particular protected area within the country. 117

Recent studies have found that many protected area sites around the world are already experiencing threats from IAS (see Box I-3). 118

Box I-3: Invasive alien species and protected areas

In 2007, the Global Invasive Species Programme (GISP), an international partnership of organizations (including IUCN and TNC), issued a report on the results of a scoping study on the effect of IAS on protected areas worldwide. The report, entitled *Invasive Alien Species and Protected Areas—A Scoping Report*, and produced for the World Bank as a contribution to the GISP, found numerous examples of severe damage to valuable protected areas in all environments—terrestrial, freshwater and marine—in all regions but especially in Asia, Africa, South and Central America (including Mexico and the Caribbean), and Europe, as well as in a great variety of types of protected areas with national and international designations (De Poorter, 2007).

In particular, the study identified 487 protected area sites worldwide that had recorded IAS as an impact or threat, including more than one in six Ramsar sites. IAS were recorded as a threat for protected areas in 106 countries, and 326 such species were reported in protected areas. Even with these alarming numbers, the report concluded that the numbers were “only the absolute tip of the iceberg” (De Poorter 2007, p. 77). Once an invasive species becomes established, the impacts may be catastrophic and are often irreversible.

These concerns have highlighted the need to strengthen integration of IAS issues into management regimes and protected areas legislation. Countries that are Parties to the CBD already have a legal obligation to address the issue of IAS in protected areas. The Convention provides that each Contracting Party shall, as far as possible and as appropriate, “prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats and species” (Art. 8(h)). The CBD Conference of the Parties in a 2002 decision (CBD COP 2002 VI/23) provides the following definitions: 119

“alien species” refers to a species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce; [...]

“invasive alien species” means an alien species whose introduction and/or spread threaten biological diversity (For the purposes of the present guiding principles, the term “invasive alien species” shall be deemed the same as “alien invasive species” in decision V/8 of the Conference of the Parties to the Convention on Biological Diversity.)

In 2002, Parties to the CBD adopted 15 ‘Guiding Principles’ for the implementation of Article 8(h) of the Convention. This was motivated by the recognition that: 120

invasive alien species represent one of the primary threats to biodiversity, especially in geographically and evolutionary isolated ecosystems, such as small island developing States, and that risks may be increasing due to increased global trade, transport, tourism and climate change (CBD COP 2002 VI/23, para. 1).

The decision urged Parties and other governments, in implementing the Guiding Principles, to review “relevant policies, legislation and institutions to identify gaps, inconsistencies and conflicts, and, as appropriate, adjust or develop policies, legislation and institutions (CBD COP 2002 VI/23, para. 10).

Where IAS provisions are being developed for protected areas legislation, it may be worthwhile for the legal drafter and protected areas manager to review the full CBD decision. It is worth highlighting the 121

first six principles, which are particularly suited for inclusion in protected areas legislation to address IAS:

- (a) Use the precautionary approach in IAS decision making.
- (b) Use a three-stage hierarchical approach—prevention, early detection, rapid response—giving priority to preventing introduction as the most cost-effective and environmentally desirable response.
- (c) Use the ecosystem approach to deal with IAS.
- (d) States have a responsibility to minimize risks to other states from IAS activities within their own jurisdiction, and to provide available information on the invasive behaviour or invasive potential of a species.
- (e) IAS research and monitoring are needed for baseline information, to detect new invasions and monitor existing controls.
- (f) IAS education and public awareness are needed to support both voluntary and regulatory means for IAS prevention, eradication, control and containment.

122 These principles, coupled with scientific studies and other technical publications on IAS and protected areas, underscore the value of incorporating IAS issues in several elements of protected areas legislation. As with many complex and dynamic issues facing protected areas, subsidiary legislation (rules, regulations, operating standards) may also be important here in order to elaborate on specific requirements, processes and response elements. Key elements of protected areas legislation for IAS attention include:

- **Objectives:** promoting a national policy to prevent, control and contain IAS that may have detrimental effects on biodiversity and protected areas, and furtherance of this policy as one of the objectives of protected areas legislation.
- **Protected area system and site planning and design:** taking into account existing and potential threats from IAS, and anticipating adaptive management in overall system design and the selection of sites, as well as buffer zones and connectivity conservation areas as part of the broader landscape or seascape.
- **Management:** building flexibility into the management plan and operating procedures in order for the protected areas authority to be able to deal with unanticipated and new developments, and incorporating improved techniques for IAS prevention and control as appropriate to advance the objectives of the protected areas system and specific sites.
- **Compliance:** emphasizing education and awareness building to promote self-enforcement and reporting, strict enforcement with high penalties when offences are committed, and EIA requirements where proposed measures for IAS prevention and control may themselves pose a significant threat to the protected area.
- **International and transboundary cooperation:** including the duty of protected area authorities to promote and support exchange of information on specific threats, emergency situations, best practices, lessons learned, and new tools and techniques.
- **Schedules:** including schedules attached to the protected areas legislation, listing IAS that are particular threats to protected areas or the system overall, with a streamlined procedure for amending the schedule to update the list as threats change, without affecting the body of the law.

123 Climate change is expected to exacerbate threats to protected areas and biodiversity from invasive species by causing shifts in the distribution and ranges of populations and species. Climate change will also cause the movement of non-native species into the habitat of protected native species, making many native species even more vulnerable to non-climate threats.

3.6 Managing for climate change

Global climate change is one of the greatest threats to biodiversity conservation and protected areas in the 21st century, according to many scientists and protected area managers (Dudley et al., 2010; Lockwood et al., 2006; Saunders et al., 2009; Welch, 2005; Worboys et al., 2006). All sectors of society are critical stakeholders. Climate change is already altering landscapes through warmer temperatures across the planet and localized temperature extremes, including colder weather, as well as extreme storm events and changes in precipitation patterns. It is raising many challenges for protected areas management, including habitat shifts, IAS, changing ecological processes, declining ecosystem services, ocean acidification, sea level rise and the loss of coral reefs. 124

Scientific research is confirming that protected areas worldwide have a vital role in helping people and natural systems cope with climate change. In 2009, several leading international organizations came together to produce a report on this issue for the UN Climate Change Conference in Copenhagen in December 2009 (Dudley et al., 2010). The report, entitled ‘Natural solutions: protected areas helping people cope with climate change’, was published through the collaborative efforts of IUCN-WCPA, TNC, UNEP, the Wildlife Conservation Society, the World Bank and the World Wildlife Fund. Among other things, the report stresses the essential functions of protected areas with respect to adaptation to climate change impacts already underway and for mitigation of future change. It defines adaptation and mitigation as follows (Dudley et al., 2010, p. 7): 125

- **Adaptation:** protecting and maintaining ecosystem integrity; buffering local climate; reducing risks and impacts from extreme events such as storms, drought and sea level rise; and providing and maintaining essential ecosystem services that help people cope with changes in water supplies, fisheries, disease and agricultural productivity caused by climate change.
- **Mitigation:** preventing the loss of carbon that is already present in vegetation and soils, and capturing (or sequestering) additional carbon dioxide from the atmosphere in natural ecosystems.

Adaptation. There is a growing body of literature on the kinds of actions needed to help protected areas build resiliency and adaptively respond to climate change impacts. These include designing protected area systems with a view to adapting to climate change by emphasizing such factors as maintaining biodiversity and natural processes, anticipating transitions and adjustments that natural systems may need to make, envisioning scenarios which could allow some flexibility for plant and animal species to migrate and shift distribution, and reducing existing non-climate threats so that natural systems are better able to cope with climate change impacts (Schliep et al., 2008). 126

These actions benefit from supportive protected area laws and policies. Moreover, protected area authorities at appropriate levels should be meaningfully involved in broader policy frameworks within which national climate change strategies are being developed and implemented. This is important to ensure that conservation objectives are properly incorporated, so that protected area authorities have access to national databases and satellite and remote sensing systems to monitor species and habitat changes, and to facilitate their participation in building regional and international collaboration to share experiences and lessons learned. 127

Mitigation. The role of protected areas in the mitigation of future climate change relates to the ability of protected areas to store and manage carbon, which can help reduce atmospheric concentrations of greenhouse gas emissions as part of worldwide mitigation efforts to stabilize climate over time. These functions could be reflected in protected areas legislation in two respects. 128

The first is for the lead protected areas agency and site-specific protected area authorities to establish a vision and plan for their operations to become carbon-neutral, in other words to reduce and avoid 129

carbon emissions. This is beginning to happen in some large protected area systems (Saunders et al., 2009, pp. 39–40). Such measures could focus on vehicle use, infrastructure development, energy use, management of visitor facilities and visitor activities, and the use of marine vessels and visitor vehicles. Additional measures might relate to including emissions-reduction policies and rules in contracts or arrangements with concessionaires in their protected area operations and with other user groups, and adding similar provisions to cooperative and collaborative agreements with other governmental and non-governmental entities. Providing educational materials to visitors and nearby communities about climate change, the role of protected areas in responding to climate change, and actions that individuals and communities can take to reduce carbon emissions in their daily lives and help preserve protected areas could also be a new and important role for protected area authorities.

- 130 The second important aspect of the role of protected areas in climate change mitigation relates to their ability to serve as carbon sinks to reduce concentrations of greenhouse gases in the atmosphere. This is particularly the case with protected forestlands and grasslands (Kulshreshtha and Johnson, 2004). New scientific evidence has found that many MPAs may play this role as well (Laffoley and Grimsditch, 2009). Establishing new or expanding existing protected areas in forests, grasslands and marine ecosystems may generate benefits of carbon sequestration in addition to biodiversity conservation. For maximum benefit, existing protected areas need to be managed effectively in order to maintain their capacity for carbon storage. In many sites, enforcement may require strengthening in order to stop illegal logging or other actions destructive of natural vegetation which may cause more carbon to be released than stored. This also highlights the importance of restoring degraded protected areas with revegetation and reforestation to expand their capacity for carbon storage.
- 131 New global initiatives are underway to provide economic incentives for developing countries to undertake large-scale forest, grassland and marine conservation efforts to expand carbon storage and contribute to climate change mitigation. One such initiative is the UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD). The goal of REDD is to stop, or at least significantly curtail, current deforestation and devegetation in natural areas, and to support reforestation and revegetation to increase the carbon storage capacity of natural systems. The concept was discussed at the Fifteenth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, in Copenhagen in 2009. Among the results of the Copenhagen Conference was the decision to expand the concept of REDD to 'REDD+' in order to encompass conservation, the sustainable management of forests and the enhancement of forest carbon stocks. The Copenhagen Accord (2009), which resulted from the Conference, addresses the issue as follows:
- We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emissions by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries (para. 6).
- 132 For new climate change mitigation programmes to be most effective over time, they must not divert resources or attention away from existing, well-managed protected areas and their primary conservation objectives. At the same time, protected areas that may already be degraded could benefit from such initiatives as long as restoration focuses on primary conservation objectives, with improved carbon management as an added benefit. Protected areas legislation should be clear that such restoration efforts should not threaten or diminish the primary conservation objectives of the site.
- 133 **Relevance for protected areas legislation.** Climate change is occurring and some effects are already being felt in protected areas. It is certain that protected areas will face many more impacts in the coming decades. Some of these may be positive, and many may be negative. The projected timing,

nature and severity of anticipated impacts continue to present challenges for scientists and planners. It is therefore particularly important for protected areas legislation to require that protected area authorities incorporate climate change considerations into protected area design and management, using the best available scientific information. These considerations should include both adaptation and mitigation measures. Also, management provisions need to build in some flexibility for adaptive management in order for protected area managers to be able to respond to changing conditions and new, unanticipated threats, including from invasive species, as a result of climate change, as long as such responses are within the bounds of other provisions of the legislation.

Part III on the generic elements of protected areas legislation indicates a number of substantive areas where climate change issues are important to consider. These include: taking into account climate change in system and site design, planning, management and monitoring; developing climate change indicators to monitor impacts; undertaking adaptive management within the scope of the management plan, and updating such plans periodically to reflect new information about existing and potential climate change impacts; and building education and communication programmes on climate change and the role of protected areas in adaptation and mitigation. In addition, it is important for the legislation to call for and promote linkages between protected area authorities and those authorities charged with primary responsibility for climate change issues, which are usually not protected area authorities. 134

3.7 Taking an international perspective

In this increasingly interconnected world, national protected area legal frameworks need to recognize and incorporate an international perspective. The long-term success of in-situ conservation at the national level requires regional and global collaboration for the management of protected area systems as a network comprising representative samples of each of the world's different ecosystems. 135

Cooperation on an international and regional basis is also becoming increasingly essential to harmonize management and respond to regional threats, especially across borders with shared resources or ecosystems, in order to meet national conservation goals. This entails sharing information and, as appropriate and feasible, collaborating on projects and programmes, for example, in preventing or controlling IAS. 136

Another area that needs to be considered is international cooperation for migratory species. Many species of animals migrate over great distances that cross national borders and may involve migratory ranges in many countries and continents. Natural habitats for many migratory species are shrinking and becoming increasingly fragmented, requiring new approaches such as the use of conservation corridors within and between countries to facilitate species and habitat management and conservation. Such measures can only come about when countries have an international perspective about their role in global biodiversity conservation and incorporate this view into the establishment and management of their protected area systems and sites. 137

In addition, climate change brings new challenges and uncertainties to protected areas management that will call for increased efforts at coordination and collaboration across borders as well as globally. Collaboration will be important to share scientific research, experience and lessons learned about adaptive responses to projected impacts, and techniques for building and sustaining a mitigation role for protected areas with respect to carbon management while preserving their fundamental conservation objectives. 138

4 Governance principles in decision making

- 139 The terms ‘governance’ and ‘good governance’ have been steadily entering policy and social discourse, particularly in relation to development. Governance is an important concept for modern protected areas legislation because it relates to processes of government decision making, including decision making about protected areas. Governance also includes the formal and informal institutions that make and implement decisions. The processes of decision making and the institutions that make decisions have a major influence on the goals and objectives of a designated protected area and on the long-term effectiveness of protected area sites and systems.
- 140 In the 1980s, the concept of governance began to receive increased attention in the development community as international institutions and donors linked aid to accountability and the rule of law. Governance remains an important focus for donor funding today. In addition, it has become an important concept in the context of societies’ relationships to their governments and the associated responsibilities of governments to the societies they represent.
- 141 While the concept of governance has seen a surge of interest in recent years at the international and national levels, among academics, donors and civic organizations there is no internationally agreed definition. Some organizations have developed definitions useful for their own operations (see Box I-4).
- 142 Apart from its recent popularity, the concept of governance is as old as human society. Simply put, governance refers to the process of decision making and the processes by which decisions are implemented (or not implemented). It is the means by which society defines goals and priorities, and advances cooperation. This broad meaning of governance has ‘government’ as only one of the actors. It embraces both the formal and informal actors involved in decision making and implementation, and both formal and informal structures that have been set in place to arrive at and implement decisions. It includes policies, laws, decrees, norms, instruments, institutions and processes—all the means by which society defines and achieves its goals and priorities.
- 143 IUCN and others characterize governance as the interactions among political and social structures, processes and traditions that determine how power and responsibility are exercised, how decisions are taken, and how citizens or other stakeholders have their say (Borrini-Feyerabend et al., 2006; Graham et al., 2003). IUCN’s published work on governance has been mostly in the context of protected areas.
- 144 Governance has two dimensions: quality of governance (how one governs) and type of governance (who governs). This characterization was brought out clearly in the Vth IUCN-WPC recommendations on good governance (IUCN-WPC 2003 V.16) and governance types (IUCN-WPC 2003 V.17). In 2004, the CBD Secretariat also applied this characterization to protected areas in the context of planning, establishment and management (Borrini-Feyerabend, 2004). This theme was subsequently reflected in other documents produced by IUCN (for example, Lockwood et al., 2006).
- 145 The remainder of the governance discussion in this Part focuses on principles of governance (sometimes called ‘good governance’) that are important to incorporate in protected areas legislation. Part II focuses on the issue of who governs protected areas—a question that translates into who holds decision-making power and is held accountable.

4.1 Good governance

- 146 Just as there is no single or exhaustive definition of ‘governance’, there is no single definition of ‘good governance’ in international law and policy. Nor is there a delineation of its scope that has universal acceptance. The term is used with great flexibility and is commonly defined in the context of the

organization or individual doing the defining. In the broadest sense, as characterized by the UN Office of the High Commissioner for Human Rights, a test of good governance is the degree to which it delivers on the promise of human rights—civil, cultural, economic, political, social and environmental (see OHCHR, 2007).

Box I-4: Definitions of governance used by international organizations

African Development Bank

A process referring to the manner in which power is exercised in the management of the affairs of a nation, and its relations with other nations (AfDB, 2010).

Asian Development Bank

Governance is about the institutional environment in which citizens interact among themselves and with government agencies/officials (ADB, 1999).

Commission of the European Communities

Governance means rules, processes and behaviour that affect the way in which powers are exercised at European level, particularly as regards openness, participation, accountability, effectiveness and coherence (Commission of the European Communities, 2001).

Good Governance: As the concepts of human rights, democratization and democracy, the rule of law, civil society, decentralized power sharing, and sound public administration gain importance and relevance as a society develops into a more sophisticated political system, governance evolves into good governance (Commission of the European Communities, 2003).

Council of the European Union

Good governance is the transparent and accountable management of human, natural, economic and financial resources for the purposes of equitable and sustainable development (Council of the European Union, 2003).

Organisation for Economic Co-operation and Development

Governance is the exercise of political, economic and administrative authority necessary to manage a nation's affairs (OECD, 2007).

United Nations Development Programme

Governance is the system of values, policies and institutions by which a society manages its economic, political and social affairs through interactions within and among the state, civil society and private sector. It is the way a society organizes itself to make and implement decisions—achieving mutual understanding, agreement and action. It comprises the mechanisms and processes for citizens and groups to articulate their interests, mediate their differences, and exercise their legal rights and obligations. It is the rules, institutions and practices that set limits and provide incentives for individuals, organisations and firms. Governance, including its social, political and economic dimensions, operates at every level of human enterprise, be it the household, village, municipality, nation, region or globe (UNDP, 2007).

United Nations Economic and Social Commission for Asia and the Pacific

Governance means the process of decision making and the process by which decisions are implemented, or not implemented (UNESCAP, 2010).

World Bank

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them (World Bank, 2009).

Good governance principles are linked to human rights principles. Article 21 of the Universal Declaration of Human Rights (1948) states:

147

1. Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
2. Everyone has the right of equal access to public service in his country.

3. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

148 Good governance in government decision making has been recognized as essential for sustainable development by such international policy instruments as the UN Millennium Declaration (2000) and the WSSD Plan of Implementation of (UN, 2002). More specifically, in recent years this recognition has extended to protected areas management. The CBD formally recognizes the importance of good governance in its Programme of Work on Protected Areas (CBD COP 2004 VII/28). Element 2 of that work programme is devoted to ‘Governance, participation, equity, and benefit sharing’. Element 3 on ‘Enabling activities’ also suggests that Parties consider “governance principles, such as the rule of law, decentralization, participatory decision-making mechanisms for accountability and equitable dispute resolution institutions and procedures” (CBD COP 2004 VII/28, para. 3.1.4).

149 Several governance principles, such as accountability, transparency, participation, rule of law and effectiveness, have been recognized by a number of international organizations (see Table I-3). It should be noted that these organizations may have different formulations for their governance principles as well as for other principles considered within the scope of governance, for example, access to information and justice, and equity.

Table I-3: Major governance principles recognized by international organizations

	IUCN	UNDP	UNESCAP	Commission of the European Communities	African Development Bank	Asian Development Bank	World Bank
Accountability	■	■	■	■	■	■	■
Transparency (“Openness”- EU Commission)	■	■	■	■	■	■	■
Participation	■	■	■	■	■	■	■
Rule of law	■	■	■			■	■
Effectiveness		■	■	■			■

Source: AfDB, 2008; ADB, 1999; Commission of the European Communities, 2001; IUCN, 2010b; UNDP, 1997; UNESCAP, 2010; World Bank, 2009.

150 IUCN and its membership have developed policy guidance on good governance through various documents. In particular, the Vth IUCN-WPC in 2003 adopted a recommendation calling on governments and civil society to endorse “the importance of governance as a key concept for protected areas and promote ‘good governance’ as essential for the effective management of protected areas of all types in the 21st century” (IUCN-WPC 2003 V.16). Acknowledging that the situation in each country is different, the recommendation urges governments and civil society to:

RECOGNIZE that governance of protected areas should reflect and address relevant social, ecological, cultural, historical and economic factors, and what constitutes ‘good governance’ in any area needs to be considered in light of local circumstances, traditions and knowledge systems (IUCN-WPC 2003 V.16).

151 The same recommendation also directs guidance specifically to “all those involved in the establishment and management of protected areas,” calling on practitioners to give attention to five key elements of decision making that promote good governance:

- (a) recognition of diverse knowledge systems;
- (b) openness, transparency and accountability in decision making;
- (c) inclusive leadership;
- (d) mobilizing support from diverse interests, with special emphasis on partners and local and indigenous communities; and
- (e) sharing authority and resources, and devolving or decentralizing decision-making authority and resources where appropriate (IUCN-WPC 2003 V.16, para. 4).

The 2008 IUCN-WCPA guidelines on protected area management categories identify nine broad principles for good governance in the context of protected areas (Dudley, 2008): 152

- **Legitimacy and voice:** social dialogue and collective agreement on protected area management objectives and strategies, on the basis of freedom of association and speech, with no discrimination related to gender, ethnicity, lifestyles, cultural values or other characteristics.
- **Subsidiarity:** attributing management authority and responsibility to the institutions closest to the resources at stake.
- **Fairness:** sharing equitably the costs and benefits of establishing and managing protected areas, and providing a recourse to impartial judgment in case of related conflict.
- **Do no harm:** making sure that the costs of establishing and managing protected areas do not create or aggravate poverty and vulnerability.
- **Direction:** fostering and maintaining an inspiring and consistent long-term vision for the protected area and its conservation objectives.
- **Performance:** effectively conserving biodiversity whilst responding to the concerns of stakeholders and making wise use of resources.
- **Accountability:** having clearly demarcated lines of responsibility, and ensuring adequate reporting and answerability from all stakeholders about the fulfilment of their responsibilities.
- **Transparency:** ensuring that all relevant information is available to all stakeholders.
- **Human rights:** respecting human rights in the context of protected area governance, including the rights of future generations.

These principles and concepts become grounded in legislation when they are translated into an appropriate legal form as part of decision-making requirements and processes for protected area design and management. Three main applications are through provisions on access to information, public participation, and social equity and justice. 153

4.2 Aarhus Convention

A significant step for the application of good governance principles was taken in international law in 1998 when countries adopted the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (known as the Aarhus Convention, after the city where it was adopted). This Convention entered into force in 2001 and 44 countries are Parties to the Convention. 154

Under the Convention, meaningful involvement in the environmental decision making of the government is facilitated by greater transparency and accountability among government bodies. The Convention's objectives are clustered into three main guarantees to the public, called pillars of the Convention. These are: (1) reasonable access to information on the environment, (2) public participation in decision making, and (3) access to justice in environmental matters (Art. 1). Each Party is required to take the 155

necessary legislative, regulatory and other measures to implement the objectives, achieve compatibility between them, and provide proper enforcement (Art. 3).

- 156 The Aarhus Convention was negotiated within the framework of the United Nations Economic Commission for Europe, which provides its Secretariat. It is open to state members of the Economic Commission for Europe as well as states having consultative status with the Economic Commission for Europe. It is presently the leading international law instrument for defining and elaborating a good governance framework of principles for governments, giving considerable attention to implementation guidance (Stec and Casey-Lefkowitz, 2000). Its provisions are fully applicable to all projects supported by the Convention Parties in other countries. This has implications for protected areas supported by bilateral and multilateral aid from countries which have ratified the Convention.
- 157 Legal drafters will want to take note of recent action by the UNEP to support the Aarhus principles and their global extension in national legislation. The UNEP Governing Council at its 11th Special Session in February 2010 adopted guidelines for the development of national legislation on access to information, public participation and access to justice in environmental matters (UNEP, 2010). These guidelines in draft form had been the subject of a Consultation Meeting of Government Officials and Experts in June 2008, and were introduced again with commentary for final consideration at the 2010 Special Session. The Governing Council in its decision noted that the guidelines are voluntary. It requested the Secretariat to disseminate the guidelines to all countries, along with the commentary on the guidelines, for further comments to enhance their quality. The Governing Council requested the Executive Director to assist countries, upon their request, with the development or amendment of national legislation, policies and strategies on access to information, public participation and access to justice in environmental matters.
- 158 The next three sections go beyond the Aarhus Convention to examine the specific application of access to information, participation, social equity and justice principles in the context of protected areas legislation. These sections draw upon the extensive literature available on the subject.

4.3 Access to information

- 159 Implementing the governance principle of public access to information requires governments to set up two systems. One system is needed to allow the public to request and receive information. Another is needed for record-keeping and dissemination mechanisms, so that government agencies are able to collect and actively distribute information without request.
- 160 In protected areas legislation, access to information is activated through two main approaches. First, the legislation should identify specific documents to be made publicly available for review, comment and information in draft and final form. These provisions normally state who is responsible for providing access and for distribution, how or where the information may be obtained, and the time frame and means by which comments will be received, where applicable. As reflected in the generic elements for protected areas legislation in Part III, public access should be provided by protected area authorities to such key documents as draft and final protected area system plans; proposals to declare an area as a protected area; draft and final management plans; and monitoring, evaluation and financial reports where public monies are involved. Increasingly, access to draft reports for public comment as well as final reports is being provided through electronic databases and the Internet, which cuts costs and may facilitate wider access.
- 161 The second approach is to provide public access to certain government documents upon request, outside of any review and comment process. These documents could include, for example, scientific reports and data analyses by the government or other entities, related to decision making on the

establishment or management of a site, or comments received by government agencies as part of a review process for a draft plan where public monies are involved.

In many jurisdictions, access to government decision-making information in general is governed by legislation of its own, which lays out the procedures for requests and for government response. This is the case, for example, in the US where the federal Freedom of Information Act 1966, as amended, outlines the procedure and kinds of documents available to the public upon request (5 USC Section 552). Where there is separate legislation adequate for the purposes of protected areas, this may be applied and incorporated by reference. Where separate legislation does not exist or is insufficient, protected areas legislation should include basic provisions on how the public can access the relevant government documentation concerning the protected area system or sites. Subject to local legal practice, general requirements for access to information may be contained in the principal protected areas legislation, with the details provided in operational documents. 162

Provisions with respect to requesting documents could include the form a request should take, the time frame within which the government entity should respond, and other reasonable conditions. Sometimes a nominal fee will be charged for hard copies of documents where the authority has limited resources. 163

Procedures will normally also include standards or guidelines for situations when information may be refused, such as when it is part of an active judicial or administrative proceeding, is personal data, or needs to be withheld to protect the environment. The latter situation may occur where valuable commercial resources are located in a proposed marine or terrestrial protected area which may be exploited illegally if known before interim protection can be put into place, or to safeguard an existing site from harm, for example, where rare species are living in the wild or are being bred in captivity. 164

Applying the principle of access to information through legislation promotes transparency of government decision making. Transparency enhances legitimacy, accountability and overall performance with respect to establishing and managing protected area systems and sites. The openness of the process enhances the public's ability to receive and, as appropriate, request information in a timely fashion, and to meaningfully comment and participate as relevant. 165

4.4 Public participation

Public participation in government decisions is a broadly accepted principle in international policy. For example, the Rio Declaration on Environment and Development calls for the public participation of all concerned citizens, citizen access to public information about the environment and the opportunity to participate in decision-making processes in matters relating to the environment (principle 10). 166

Meaningful public participation has several aspects in the context of protected areas legislation, which need to be incorporated into the relevant provisions of the legislation. They include the requirements of timely access to accurate, relevant and understandable information, as well as reasonable opportunity to provide meaningful comments where significant decisions are being contemplated. 167

Decisions where public participation is particularly important and should be emphasized in legislation include designating or amending a protected area, designating site management authorities, developing and approving a management plan, configuring and laying out a strategy for a protected area system plan or an MPA network, and reviewing a draft environmental and social impact assessment regarding proposed actions of the protected areas agency. The principle of public participation also embodies the requirement that comments provided through the participation processes will be taken into account in decision making. 168

169 This principle extends beyond initiatives of the government with respect to formal protected areas. It also applies to supporting the voluntary conservation initiatives of others and ensuring their full participation. For example, Element 2 of the CBD Programme of Work on Protected Areas calls on Parties to:

Establish policies and institutional mechanisms *with full participation* of indigenous and local communities, to facilitate the legal recognition and effective management of indigenous and local community conserved areas in a manner consistent with the goals of conserving both biodiversity and the knowledge, innovations and practices of indigenous and local communities (CBD COP 2004 VII/28, para. 2.1.3; emphasis added).

Reflecting the urgency felt about the need to expand the participation of all stakeholders in decisions about formal protected area systems, the Programme of Work sets the following target:

Full and effective participation by 2008, of indigenous and local communities, in full respect of their rights and recognition of their responsibilities, consistent with national law and applicable international obligations, and the participation of relevant stakeholders, in the management of existing, and the establishment and management of new, protected areas (CBD COP 2004 VII/28, goal 2.2).

170 The Programme of Work gives further emphasis to the need for effective participation, elaborating additional actions to be taken toward this target. These include a call for the Parties to:

Implement specific plans and initiatives to effectively involve indigenous and local communities, with respect to their rights consistent with national legislation and applicable international obligations, and stakeholders, at all levels of protected areas planning, establishment, governance and management, with *particular emphasis on identifying and removing barriers preventing adequate participation* (CBD COP 2004 VII/28, para. 2.2.2; emphasis added).

4.5 Social equity and justice

171 As applied to protected areas, the principle of social equity and justice requires that stakeholders, particularly those holding or claiming rights over land, sea or resources, should be respected and engaged in protected area design, establishment and management, and should have legal recourse if their rights are violated. In addition, the principle requires the fair and equitable distribution of costs and benefits among the social groups and individuals involved in or affected by the establishment and management of formal protected areas.

172 Determining what is fair and equitable in a particular case may involve many layers of interests. At the local level, for example, concerns for equity may translate into ensuring that local communities living within or adjacent to a protected area do not bear an undue share of the costs, such as through the loss of fishing grounds or other resource rights, increased traffic or other intrusions. At the national level, protected areas may generate benefits valued by people living far from the protected area but may be perceived by affected local people as a threat to their livelihoods. Where there are many diverse and dispersed interests and impacts, decision making may need to include a negotiation process involving all concerned.

173 It is important for legislation to include the obligation or duty of protected area authorities to ensure the full participation of local communities and other stakeholders and rightsholders, particularly where they may be impacted by protected area decisions. There should also be an obligation upon the protected area authorities to make arrangements for the design and management of protected areas that ensure the fair and equitable sharing of costs and benefits across the many interests involved.

174 Special mechanisms may be needed to facilitate the effective implementation of such arrangements. For example, where an agreement is reached for local benefit sharing of the revenues generated from a protected area, such as from tourism or other fees, it may be important to set up special accounting mechanisms to ensure that local communities receive their fair share and all parties have trust in the arrangement. Local communities and indigenous peoples should be permitted to maintain certain

traditional resource use practices, as long as these are compatible with the conservation objectives of the area, and periodic reporting measures may be agreed to monitor this arrangement and carry out adaptive management as needed. To ensure that agreed terms are carried through, the legislation may call for their recordation in a written agreement with the government, based on the free, prior, informed consent of all actors involved.

In the context of protected areas, access to justice means that members of the public, and especially affected and concerned persons, have legal mechanisms they can use to gain review of and to appeal decisions made by protected area authorities under the law. The rationale behind this principle is that it helps ensure consistent and effective implementation of the law, and gives meaning to the principles of access to information, participation and social equity. Without recourse to appeal or judicial review, information and participation have less effect. In addition, the public's ability to help enforce protected areas law adds important resources to government efforts. 175

In many jurisdictions, rules and procedures for access to justice may already exist in other legislation governing administrative law, the courts or legal process. In such cases, it may be inappropriate to include special provisions in protected areas legislation. However, if appropriate in the jurisdiction, protected areas legislation could include provisions for appeal of administrative decisions authorized by the law. In addition, provisions may recognize the legal standing of citizens and NGOs to bring a legal challenge for violation of their rights or to enforce the law through third-party claims (discussed further in Part III, Chapter 1, section 10.4.2). 176

5 Multilateral and supranational legal obligations

Some 667 global and regional treaties related to environmental conservation are in force today, of which 144 are global (see ECOLEX, the comprehensive online database on environmental law operated jointly by FAO, IUCN and UNEP). A number of these treaties contain specific obligations to conserve nature, biodiversity and ecosystems through the establishment of protected areas. 177

This section reviews some of the most significant global and regional treaties for national protected areas policy and law, giving examples of key provisions. Multilateral legal obligations related to biodiversity conservation are important for the legal drafter to assess in the context of protected areas legislation where the country is a Party to the treaty or may become a Party. This is because in many cases national legislative action is required to implement the obligations set out in the treaty or agreement, since most of the obligations are not self-executing. 178

Numerous documents are publicly available for in-depth analysis of the multilateral treaties discussed here. Particularly helpful for further research in the context of protected areas legislation are the websites of each treaty where the official text, decisions of Conferences of the Parties, and additional guidance relevant for national policy and law are available. These websites usually provide the most reliable and current information on their respective multilateral agreements and are the primary sources for the discussion below. 179

The global conventions noted below as the main instruments concerning a nation's protected areas are the CBD, UNESCO's World Heritage Convention, the Ramsar Convention and the CMS. These conventions, while best known for their terrestrial focus, also apply to marine environments. Generally, however, the provisions of these conventions that apply to the marine environment must be implemented in a way compatible with UNCLOS, which sets out states' rights and obligations related to the marine environment, including those addressing its protection and preservation. The marine 180

environment conventions overseen by the International Maritime Organization also provide for special protections in marine areas. Elements of these two conventions particularly relevant for MPAs under national jurisdiction are summarized in Part III, Chapter 2, which addresses additional legal issues relevant for MPAs.

5.1 Major global conventions

5.1.1 Convention on Biological Diversity

Basic data: Concluded 1992, entered into force 1993, 193 Contracting Parties

Website: <http://www.cbd.int>

Objectives: The CBD's three main objectives are biodiversity conservation, sustainable use of its components (species, genetic resources, ecosystems), and fair and equitable sharing of benefits from the use of genetic resources (Art. 1).

- 181 The Convention on Biological Diversity (CBD) is the first treaty to deal with the entire spectrum of issues related to biological diversity at all levels (species, ecosystems and genetic diversity), and to do so on a global scale. It is also the principal global treaty identifying protected areas as a significant tool for meeting its objectives. The scope of the Convention means that its effective implementation requires cooperation and coordination with a wide range of other conventions, institutions and processes, including other biodiversity-related conventions and agreements (in particular, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973), CMS, Ramsar Convention, the World Heritage Convention, and some regional seas programmes). A number of arrangements with other biodiversity-related treaties and agreements regarding collaborative activities have been concluded. Implementation is undertaken through seven thematic and 18 cross-cutting programmes, all of which have their own detailed and extensive work or guidance documents with principles and goals adopted by decisions of the Conferences of the Parties. One of the cross-cutting programmes is the Programme of Work on Protected Areas highlighted below, which most directly guides activities of protected areas but is by no means the only programme to do so. All programme documents are available on the CBD website.
- 182 **Relevance for protected areas law.** Virtually all of the Convention has some relevance for protected areas law because of the clear role of protected areas in biodiversity conservation. To begin with, three general points are worth highlighting for the legal drafter:
- The Convention in Article 2 defines 'biological diversity', 'ecosystem' and other key terms, some of which may be worth taking into consideration and, as appropriate, incorporating in national protected areas legislation.
 - The Convention's focus on the ecosystem approach includes recognition that "biological diversity is critical both for its intrinsic value and for the key role it plays in providing the ecosystem and other services upon which we all ultimately depend" (CBD COP 2004 VII/11, principle 10).
 - The Convention's Article 8 is the main provision concerning protected areas and in-situ conservation, setting out obligations for the Parties that specify requirements and objectives to be met, including several that are directly relevant or have implications for national legislation (see Box I-5).
- 183 **CBD Programme of Work on Protected Areas.** The Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity in 2004 adopted a detailed and ambitious Programme of Work on Protected Areas for all Parties to implement. The Programme is applicable to terrestrial and marine protected areas, as well as connectivity conservation areas and transboundary and regional systems.

It is divided into four elements, 16 goals and numerous targets for specific activities to be achieved in the period 2006–2015 (see Dudley et al., 2005). These include targets originally set at the 2002 WSSD and the 2003 Vth IUCN-WPC: establishing a comprehensive, representative and effectively managed global network of terrestrial protected areas by 2010 and MPAs by 2012 at national and regional levels (CBD COP 2004 VII/28, para. 18 and goal 1.1). The aim of these global networks collectively is to contribute to the three objectives of the CBD and the 2010 target to significantly reduce the current rate of biodiversity loss.

Box I-5: In-situ conservation—key CBD provisions for protected areas legislation

Article 8 provides the main set of CBD obligations for the conservation of biological diversity through in-situ conservation, the primary approach being through protected areas. Key provisions important for consideration in national protected areas legislation are highlighted below.

Each Contracting Party shall, as far as possible and as appropriate:

- (a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;
- (b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity;
- (c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use;
- (d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;
- (e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas; [...]
- (g) Establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health;
- (h) Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species; [...]
- (j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices;
- (k) Develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations;
- (l) Where a significant adverse effect on biological diversity has been determined pursuant to Article 7 (identifying and monitoring components of biodiversity), regulate or manage the relevant processes and categories of activities; and
- (m) Cooperate in providing financial and other support for in situ conservation outlined in subparagraphs (a) to (l) above, particularly to developing countries.

Source: CBD, Art. 8.

Virtually all of the programme elements, goals and targets will be most effective when implemented within a supportive legal and policy framework. Some elements apply to principles and concepts already discussed, and others are especially relevant to subsequent sections of these guidelines on protected areas legislation (for example, MPAs in Part III, Chapter 2, and indigenous and community conserved areas in Part II).

184

Provisions of the Programme of Work on Protected Areas that give broad mandates and set out general requirements for national protected areas law and policy fall principally into two programme elements:

185

'Programme Element 3: Enabling Activities' (see Box 1-6), and 'Programme Element 2: Governance, Participation, Equity, and Benefit Sharing'.

Box I-6: Law-related emphasis of CBD Programme of Work on Protected Areas

A number of elements in the CBD Programme of Work on Protected Areas specifically target legal actions that should be undertaken by Parties to the Convention:

Programme Element 3: Enabling activities

Goal 3.1: To provide an enabling policy, institutional and socio-economic environment for protected areas.

Suggested activities of the Parties:

- 3.1.1 By 2006, identify legislative and institutional gaps and barriers that impede the effective establishment and management of protected areas, and by 2009, effectively address these gaps and barriers.
- 3.1.3 Harmonize sectoral policies and laws to ensure that they support the conservation and effective management of the protected area system.
- 3.1.4 Consider governance principles, such as the rule of law, decentralization, participatory decision-making mechanisms for accountability and equitable dispute resolution institutions and procedures.
- 3.1.5 Identify and remove perverse incentives and inconsistencies in sectoral policies that increase pressure on protected areas, or take action to mitigate their perverse effects. Whenever feasible, redirect these to positive incentives for conservation.
- 3.1.6 Identify and establish positive incentives that support the integrity and maintenance of protected areas and the involvement of indigenous and local communities and stakeholders in conservation.
- 3.1.7 Adopt legal frameworks to national, regional and sub-national protected areas systems of countries where appropriate.
- 3.1.8 Develop national incentive mechanisms and institutions and legislative frameworks to support the establishment of the full range of protected areas that achieve biodiversity conservation objectives including on private lands and private reserves where appropriate.
- 3.1.10 Develop necessary mechanisms for institutions with responsibilities for conservation of biological diversity at the regional, national and local level to achieve institutional and financial sustainability.
- 3.1.11 Cooperate with neighbouring countries to establish an enabling environment for transboundary protected areas and for neighbouring protected areas across national boundaries and other similar approaches including regional networks.

Source: CBD COP 2004 VII/28.

5.1.2 Convention Concerning the Protection of the World Cultural and Natural Heritage

Basic Data: Concluded 1972, entered into force 1975, 186 States Parties

Website: <http://whc.unesco.org/en/about>

Objectives: To establish an effective system of collective protection of cultural and natural heritage of outstanding universal value worldwide, organized on a permanent basis and in accordance with modern scientific methods (preamble).

186 The Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention, or WHC) is concerned with the national and international protection of cultural and natural heritage which is of outstanding universal value, as defined by the Convention. Having been concluded on the occasion of the 1972 United Nations Conference on the Human Environment (Stockholm Conference), this Convention is one of the first of the modern international law instruments where protected areas are a primary means for States Parties to meet their obligations to protect natural heritage sites (or mixed natural and cultural sites) in their territories when of outstanding universal

value nationally and internationally. The Convention provides that such sites may be put on the World Heritage List of natural and cultural heritage of outstanding universal value, when so nominated by the state in which the site is located and accepted by the World Heritage Committee based on criteria that the Committee defines.

The World Heritage Committee, the main body in charge of establishing the List and overall Convention implementation, consists of representatives from 21 State Parties to the Convention, elected by the General Assembly of States Parties to the World Heritage Convention. As of December 2009, the World Heritage List included 890 properties: 689 cultural, 176 natural and 25 mixed properties in 148 states. 187

The Convention also establishes a World Heritage Fund and provides authority for the World Heritage Committee to receive and take action on requests for international assistance from States Parties to the Convention. These requests may relate to protection, conservation, preservation or rehabilitation of a property that is already on the World Heritage List or is potentially suitable for inclusion. 188

Relevance for protected areas law. For a natural land or marine property to be nominated for the World Heritage List, the site must have certain legal protections already in place. For acceptance on the List, the site must continue to be in compliance with these legal requirements. Sites can be removed from the List for failure to maintain legal protections or comply with management requirements, among other things. 189

In many respects, the Convention provides the framework within which more detailed guidance can be provided for implementation. The World Heritage Committee has developed precise criteria for such matters as the inscription of properties on the World Heritage List, requirements for remaining on the List and international assistance under the World Heritage Fund. These are included in the Operational Guidelines for the Implementation of the World Heritage Convention, the latest version issued in 2008 to reflect new concepts, knowledge or experiences (see UNESCO, 2008b). As outlined in the paragraphs that follow, the Operational Guidelines provide detailed guidance on all aspects of implementation of the Convention's obligations, including those related to the nomination of sites and those applicable once a site is listed. Additional guidelines specific to MPAs are noted in Part III, Chapter 2, section 3. 190

General obligations under the Convention: According to Article 4, each State Party to the Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage of outstanding universal value rests primarily with that state, and that each state will “do all it can to this end”. Article 5 of the Convention provides the further general obligation that each State Party shall endeavour, in so far as possible, to take appropriate legal and other measures necessary for the identification, protection, conservation, presentation and rehabilitation of cultural and natural heritage of outstanding universal value situated in its territory. In addition, each State Party “undertakes not to take any deliberate measures which might damage directly or indirectly such cultural and natural heritage” of other States Parties (Art. 6(3)), a legal obligation particularly important for transboundary natural sites of outstanding universal value. Under the Convention, each State Party is obliged, in so far as possible, to submit to the World Heritage Committee an inventory of its cultural and natural heritage sites which it considers of sufficient outstanding universal value to be included in a World Heritage List (Art. 11). On the basis of these inventories, the World Heritage Committee may include properties on the List with the consent of the state concerned. Finally, in reports which States Parties submit to the General Conference of UNESCO from time to time upon the request of the General Conference, information must be included on the legislative and administrative provisions which States Parties have adopted for application of the Convention, and such reports must be brought to the attention of the World Heritage Committee (Art. 29). 191

192 **Further legal guidance in the World Heritage Convention Operational Guidelines.** ‘Outstanding universal value’ is the standard that natural and cultural heritage properties must meet to be within the scope of the Convention. While not defined in the Convention itself, the Operational Guidelines provide the following guidance:

Outstanding universal value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole. The Committee defines the criteria for the inscription of properties on the World Heritage List (UNESCO, 2008b, p. 14, para. 49).

193 In addition, the Operational Guidelines provide criteria for the inscription of heritage properties on the World Heritage List. These criteria may be helpful for the legal drafter to consider when drafting provisions for identifying natural heritage sites or mixed natural and cultural heritage sites as possible protected areas of outstanding universal value and suitable for inclusion in the inventory of properties submitted to the World Heritage Committee for the World Heritage List. Natural properties nominated for inclusion in the World heritage List should:

- (a) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- (b) be outstanding examples representing major stages of the earth’s history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features;
- (c) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, freshwater, coastal and marine ecosystems and communities of plants and animals;
- (d) contain the most important and significant natural habitats for the in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation (UNESCO, 2008b, para. 77).

194 **Nomination for the World Heritage List.** The Operational Guidelines identify several legal and institutional elements that should be in place for properties nominated for the World Heritage List (UNESCO, 2008b):

- (a) All properties nominated for the World Heritage List must have adequate long-term legislative, regulatory, institutional or traditional protection and management to ensure their safeguarding. This protection should include adequately delineated boundaries. States Parties should demonstrate adequate protection at the national, regional, municipal or traditional level for a nominated property. The nomination should be accompanied by appropriate texts with a clear explanation of the way this protection operates to safeguard the property (para. 97).
- (b) Legislative and regulatory measures at the national and local levels should assure the survival of the property and its protection against development and change that might negatively impact the outstanding universal value of the property, or its integrity or authenticity. States Parties should also assure full and effective implementation of such measures (para. 98).
- (c) The delineation of boundaries is an essential requirement in the establishment of effective protection for nominated properties. Boundaries should be drawn to ensure the full expression of the outstanding universal value and integrity or authenticity of the property (para. 99).
- (d) The boundaries of the nominated property may coincide with one or more existing or proposed protected areas, such as national parks, nature reserves, biosphere reserves or protected historic districts. While such areas may contain several management zones, only some of those zones may satisfy criteria for inscription (para. 102).

- (e) Wherever necessary for the proper conservation of a listed or nominated property, an adequate buffer zone with precise boundaries should also be provided, with complementary legal or customary restrictions to protect the property (para. 103–104). Where no buffer zone is proposed, the nomination should explain why it is not required (para. 106).
- (f) Each nominated property needs an appropriate management plan or other documented management system, specifying how the property's outstanding heritage values should be preserved (para. 108, 111).
- (g) For transboundary properties, it is recommended that nominations are submitted jointly by all States Parties concerned and that a joint management body is established to oversee management of the property as a whole (para. 135).

Obligations when a site is on the World Heritage List. The Operational Guidelines provide that the elements enumerated above for nomination of a site must be maintained once a site has been included on the World Heritage List. These are measures that help indicate fulfilment of the general obligation to protect and manage the properties to ensure that conditions of integrity or authenticity at the time of listing are maintained and enhanced in the future (UNESCO, 2008b, para. 96). If these conditions, including the necessary legislative and regulatory measures, are not maintained, the Convention provides that the property may be put on the List of World Heritage in Danger (Art. 11(4)). 195

List of World Heritage in Danger. The Convention calls upon the World Heritage Committee to establish and maintain a second list in addition to the World Heritage List. This list, called the List of World Heritage in Danger, identifies property that is already on the World Heritage List but for which major conservation operations are needed and assistance has been requested under the Convention (Art. 11). This list must include an estimate of the cost of conservation operations needed for each listed site, identifying only that part of the cultural and natural heritage property that is actually being threatened by serious and specific dangers. As with the World Heritage List, the World Heritage Committee defines the criteria for putting a property on the List of World Heritage in Danger. 196

For a property to be put on the List of World Heritage in Danger, the World Heritage Committee must find that the condition of the property corresponds with at least one of several criteria. In the case of natural properties, these include (UNESCO, 2008b, para. 180): 197

- (a) **Ascertained Danger.** The property is faced with specific and proven imminent danger, such as:
 - A serious decline in the population of the endangered species or other species of outstanding universal value which the property was legally established to protect, either by natural factors such as disease or by man-made factors such as poaching.
 - Severe deterioration of the natural beauty or scientific value of the property, as a result of human settlement, construction of reservoirs which flood important parts of the property, industrial and agricultural development including the use of pesticides and fertilizers, major public works, mining, pollution, logging, or firewood collection.
 - Human encroachment on boundaries or in upstream areas, threatening the integrity of the property.
- (b) **Potential Danger.** The property is faced with major threats which could have deleterious effects on its inherent characteristics, including:
 - modification of the legal protective status of the area;
 - planned resettlement or development projects within the property or so situated that the impacts threaten the property;
 - outbreak or threat of armed conflict;
 - the management plan or management system is lacking or inadequate, or not fully implemented.

198 **Sustainable use.** The Operational Guidelines also deal with sustainable use within a world heritage site:

World Heritage properties may support a variety of ongoing and proposed uses that are ecologically and culturally sustainable. The State Party and partners must ensure that such sustainable use does not adversely impact the outstanding universal value, integrity and/or authenticity of the property. Furthermore, any uses should be ecologically and culturally sustainable. For some properties, human use would not be appropriate (UNESCO, 2008b, para. 119).

199 **Relationship to IUCN protected area categories.** A 2007 report of the UNESCO World Heritage Centre, prepared for an IUCN conference on the definition of protected areas, analyses the relationship of natural world heritage sites to the IUCN protected area definition and categories (Patry, 2008). The report makes several observations that are important for the legal drafter to keep in mind in the national context. It notes that a world heritage designation is not itself a protected area category, but rather that a variety of protected area categories may comfortably fit within a world heritage site, suggesting versatility to accommodate different but limited intensities of use, particularly in marine sites. The report concludes that the World Heritage Committee is not constrained by the IUCN categories when deciding on the inclusion of natural sites in the World Heritage List. However, “only in rare circumstances would a biodiversity World Heritage nomination be inscribed if it is comprised exclusively of a category V and/or VI protected area” (Patry, 2008, pp. 145–146).

200 Importantly, IUCN is identified in the Operational Guidelines as one of three Advisory Bodies to the World Heritage Committee, along with the International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM), and the International Centre for Monuments and Sites (ICOMOS) (UNESCO, 2008b, para. 30). Each Advisory Body member is to advise on implementation of the World Heritage Convention in its field of expertise. Thus IUCN plays a key technical role in helping the World Heritage Committee to assess the outstanding universal value of a nominated site’s natural heritage, whatever protected area category the site may be assigned within the national protected areas system. In addition to identifying the roles of all three Advisory Bodies in relation to the World Heritage Convention with respect to documentation, planning, monitoring and evaluation in their respective fields, the Operational Guidelines also spell out a specific role of each member. For IUCN, this role includes:

evaluation of properties nominated for inscription on the World Heritage List, monitoring the state of conservation of World Heritage natural properties, reviewing requests for International Assistance submitted by States Parties, and providing input and support for capacity-building activities (UNESCO, 2008b, para. 37).

5.1.3 Convention on Wetlands of International Importance especially as Waterfowl Habitat

Basic data: Concluded 1971, entered into force 1975; 159 Contracting Parties

Website: <http://www.ramsar.org>

Objectives: The Convention’s mission is the “conservation and wise use of all wetlands through local, regional and national actions, and international cooperation, as a contribution towards achieving sustainable development throughout the world.” Its primary objective is the protection of wetlands for their fundamental ecological functions as regulators of water regimes and as habitats supporting flora and fauna, especially waterfowl (defined as birds ecologically dependent on wetlands). Listing a wetland under the Ramsar Convention gives it the status of a wetland of international importance.

201 The official name of the treaty, Convention on Wetlands of International Importance especially as Waterfowl Habitat, reflects the original emphasis on wetlands primarily as habitat for waterbirds. It is commonly referred to as the Ramsar Convention, after the town in Iran where it was concluded.

Over the years, the Convention has broadened its scope to cover all aspects of wetland conservation and wise use, including creating wetland reserves and, in recent years, recording the protected area category of a Ramsar site where the site is a designated protected area. The Ramsar Secretariat has generated a number of guidelines and publications, available online, to help countries implement the provisions of the Convention.

Relevance for protected areas law. Parties to the Convention have an obligation to designate, at the time of ratification or accession, at least one wetland for inclusion in the List of Wetlands of International Importance (the Ramsar List), to promote conservation of the site and to continue designating suitable wetlands within its territory (Art. 2(1)). The Contracting Parties have developed specific ecological criteria and guidelines for identifying sites as internationally important to qualify for inclusion in the Ramsar List. 202

There is no obligation in the Convention text for listed sites to be legally protected areas under national legislation. However, the Convention provides that each Contracting Party “shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening” (Art. 4(1)). The 4th Meeting of the Conference of the Contracting Parties in 1990 emphasized this provision, recommending that “Contracting Parties establish in their territory national networks of nature reserves covering both listed and non-listed wetlands” (Ramsar COP 1990 4.4). Moreover, the Ramsar Convention Manual explains that “whether or not Ramsar status conveys additional legal protection in-country depends upon the national and local policy and legislation concerning Ramsar sites, which varies from country to country” (Ramsar Convention Secretariat, 2006, pp. 89–90, s. 5.2). 203

Under the Convention, Contracting Parties have an obligation, triggered immediately upon listing a wetland site, to formulate and implement national land use planning to promote conservation of the site (Art. 3(1)). Parties also have an obligation to formulate and implement national land use plans to promote wise use of all wetlands in their territory, not just those on the Ramsar List (Art. 3(1)). Guidelines and handbooks have been developed on how to achieve ‘wise use’, which has been interpreted as being ‘sustainable use’. 204

A listing under the Ramsar Convention elevates the site to the high status of ‘international importance’. Recognizing that listed wetlands may also increasingly be protected areas under national legislation, the 9th Meeting of the Conference of the Contracting Parties in 2005 adopted a resolution agreeing to include extra data fields in the approved Ramsar Information Sheet for “Protected area categories, if any, for the site, as established by each Contracting Party, and/or IUCN categories (1994), if appropriate, and any other relevant designations”, and requested all Contracting Parties to provide such information in their next updates (Ramsar COP 2005 IX.22). 205

Parties have an obligation to maintain the boundaries of a wetland site once it is on the Ramsar List. However, the Convention notes: 206

Where a Contracting Party *in its urgent national interest*, deletes or restricts the boundaries of a wetland included in the List, it should as far as possible compensate for any loss of wetland resources, and in particular it should create additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat (Art. 4(2); emphasis added).

This provision, which is sometimes referred to as ‘no-net loss’, creates some uncertainty about the long-term security of listed wetlands, particularly under circumstances of growing development pressures and political change, and presents special challenges in application. It reinforces the need to include Ramsar-listed and other important national wetlands within protected areas legislation in order to provide this security.

207 The Convention requires that Contracting Parties consult with each other about implementing their obligations, especially with regard to transboundary wetlands, shared water systems and shared species (Art. 5).

208 **Relationship to IUCN protected area categories.** The Ramsar Secretariat, in a paper prepared for the 2007 IUCN international conference on the protected area definition, analyses the relationship between listed Ramsar wetland sites and the IUCN protected area categories (Ramsar Secretariat, 2008). In light of the 2005 decision of the Conference of Contracting Parties to begin recording protected area categories, if any, for listed Ramsar sites (Ramsar COP 2005 IX.22), the paper aims to demonstrate that the IUCN categories system is not only compatible with Ramsar listings but can be used to inform the planning, management and effectiveness of such sites.

209 Recognizing that the IUCN categories system is designed for global use, the paper suggests that the system has sufficient flexibility to be relevant in the national context, since assignment of an IUCN category to a Ramsar site is a matter normally left to governments to decide. In that context, the paper concludes that the benefits of using the IUCN system in a transparent way can be significant, particularly for global assessments. As explained by the Ramsar Secretariat, the IUCN categories system facilitates:

development and further establishment of a Ramsar site system in which each country can maintain its individual Ramsar site network, yet be clearly part of a global framework. It also allows the Ramsar site network to relate and contribute to the development of a globally comprehensive, adequate and representative system of protected areas (Ramsar Secretariat, 2008, p. 141).

5.1.4 Convention on the Conservation of Migratory Species of Wild Animals

Basic data: Concluded 1979, entered into force 1983, 113 Parties

Website: <http://www.cms.int/about/index.htm>

CMS 'Family Guide': http://www.cms.int/publications/cms_guide.htm

Objectives: The main objective is to conserve terrestrial, marine and avian migratory species throughout their range, along with habitat on a global scale, giving special attention to those species with an unfavourable conservation status.

210 To achieve its objectives, the Convention on the Conservation of Migratory Species of Wild Animals (CMS, also known as the Bonn Convention) provides a framework for bringing together the states through which migratory animals pass, and lays the legal foundation for conservation measures throughout the species' migratory range. The CMS sets out Appendices which list migratory species with different conservation status and provides for agreements among Range States for the conservation and management of specific migratory species. Appendix I to the CMS lists migratory species that are endangered, defined to mean in danger of extinction throughout all or a significant portion of their range. CMS Parties have an obligation to strictly protect these animals, conserve or restore their habitats, prevent or minimize obstacles to their migration, and control other factors that might endanger them (Art. III).

211 Appendix II contains two lists: those migratory species that have an unfavourable conservation status and require international agreements for their conservation and management, and other species that would significantly benefit from international cooperation that could be achieved by an international agreement (Art. IV). For Appendix II species, Parties that are Range States of these species have the obligation to endeavour to conclude agreements benefiting the species, giving priority to those species with an unfavourable conservation status. In addition, Parties are encouraged to take action

to conclude agreements for any population of species or lower taxon of wild animal whose members periodically cross one or more national boundaries.

The Convention text provides guidelines for agreements concluded under its framework (Art. V). The purpose of any such agreement is to restore the migratory species concerned to a favourable conservation status or to maintain it in such a status. The Convention is explicit that each agreement should cover the whole range of the migratory species concerned and, importantly, should be open to accession by all Range States of that species, whether or not they are Parties to the Convention (Art. V(2)).

Relevance for protected areas law. Convention bodies for both the CBD and the CMS concluded a Joint Work Programme, beginning in 2006, which was adopted by the CMS at the Eighth Meeting of the Conference of the Parties in 2005. Under the Joint Work Programme, the Convention bodies agreed to a thematic framework that includes protected areas as well as networks. Among the initial activities to be undertaken within this framework is to consider the “experience gained using CMS Agreements as catalysts for networks of protected areas between countries to conserve migratory and other species, as well as their habitats” (CMS COP 2005 8.18, Annex III, para. 3(c)).

Table I-4: Agreements under the Convention on Migratory Species

Agreement	Entry into force	Party Countries
Agreement on the Conservation of Seals in the Wadden Sea	October 1991	Denmark, Federal Republic of Germany and the Netherlands
Agreement on the Conservation of Populations of European Bats (EUROBATS)	January 1994	Albania, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, former Yugoslav Republic of Macedonia, Malta, Moldova, Monaco, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, Ukraine and the UK
Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS)	March 1994	Belgium, Denmark, Finland, France, Germany, Lithuania, the Netherlands, Poland, Sweden and the UK
Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)	November 1999	119 Range States (the whole of Europe and Africa, the Middle East, parts of West Central Asia, parts of the Arctic and North-Eastern Canada and Greenland)
Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)	June 2001	Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Egypt, France, Georgia, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Portugal, Romania, Russian Federation, Slovenia, Spain, Syria, Tunisia, Turkey, Ukraine and the UK
Agreement on the Conservation of Albatrosses and Petrels (ACAP)	February 2004	Argentina, Australia, Brazil, Chile, Ecuador, France, New Zealand, Norway, Peru, South Africa, Spain and the UK
Agreement on the Conservation of Gorillas and Their Habitats	June 2008	Central African Republic, Republic of Congo, Democratic Republic of Congo, Gabon, Nigeria and Rwanda
<i>Source: CMS website.</i>		

The CMS acts as a framework convention, setting principles for migratory species conservation and management, and providing the stage for the negotiation of separate international agreements between Range States with respect to individual migratory species or, more often, groups of species.

In the course of implementing the CMS, Parties have also engaged in the negotiation of memoranda of understanding (MOUs), a possibility not explicitly provided for in the text of the Convention. MOUs are non-binding instruments and do not need ratification. They are thus easier to negotiate and conclude. They constitute an expression of political commitment at the government level. MOUs have become an increasingly important tool to seek aims similar to those of agreements that are legally binding. To be able to enter into one of these CMS-associated instruments, a country does not need to be a Party to the convention, but it needs to be a Range State of the species or group of species that the instrument intends to address.

- 215 These associated instruments (whether legally binding or MOUs) made under the Convention are the main vehicle to set out country-level obligations regarding specific species agreed among the Range States. These obligations vary according to the conservation status of the species concerned, but commonly include habitat conservation or restoration along the migratory routes through protected areas and other means. Where a country has become a Party to a particular agreement, or there is potential for participation in such an agreement in the future, it is particularly important for the legal drafter working with protected area management authorities and wildlife specialists to include recognition of critical habitats for migratory species among the goals and purposes of the protected areas system or network. A Range State in relation to a particular migratory species is defined by the CMS to mean any State and, where appropriate, any other Party that exercises jurisdiction over any part of the range of that migratory species, or a state the flag vessels of which are engaged outside national jurisdictional limits in taking that migratory species (Art. 1(h)).

Table I-5: Memoranda of understanding under the Convention on Migratory Species

MOU	Entry into force	State Parties
Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane (<i>Grus leucogeranus</i>)	July 1993	Afghanistan, Azerbaijan, China, India, Iran, Kazakhstan, Mongolia, Pakistan, Russian Federation, Turkmenistan and Uzbekistan
Memorandum of Understanding Concerning Conservation Measures for the Slender-Billed Curlew (<i>Numenius tenuirostris</i>)	September 1994	30 Range States in Southern and Eastern Europe, Northern Africa and the Middle East
Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa	July 1999	Angola, Benin, Cameroon, Cape Verde, Congo, Côte d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Morocco, Namibia, Nigeria, Portugal (Azores, Madeira), Sao Tome and Principe, Senegal, Sierra Leone, South Africa, Spain (Canary Islands), Togo and the UK (Ascension Island, St Helena)
Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard (<i>Otis tarda</i>)	June 2001	Albania, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Greece, Hungary, Moldova, Poland, Romania, Slovakia, Slovenia, former Yugoslav Republic of Macedonia, and Ukraine
Memorandum of Understanding on the Conservation and Management of Marine Turtles and Their Habitats of the Indian Ocean and South-East Asia	September 2001	41 Range States; four sub-regions: South-East Asia and Australia, Northern Indian Ocean, North-Western Indian Ocean, and Western Indian Ocean
Memorandum of Understanding Concerning Conservation and Restoration of the Bukhara Deer (<i>Cervus elaphus bactrianus</i>)	May 2002	Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan

Memorandum of Understanding Concerning Conservation Measures for the Aquatic Warbler (<i>Acrocephalus paludicola</i>)	April 2003	Belarus, Belgium, Bulgaria, Germany, Hungary, Latvia, Lithuania, the Netherlands, Poland, Russian Federation, Senegal, Spain, Ukraine and the UK
Memorandum of Understanding Concerning Conservation Measures for the West African Populations of the African Elephant (<i>Loxodonta africana</i>)	November 2005	Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo
Memorandum of Understanding Concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope (<i>Saiga tatarica tatarica</i>)	September 2006	Kazakhstan, Mongolia, Russian Federation, Turkmenistan and Uzbekistan
Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region	September 2006	Australia, Cook Islands, Federated States of Micronesia, Fiji, France, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands and Vanuatu
Memorandum of Understanding Between the Argentine Republic and the Republic of Chile on the Conservation of the Ruddy-Headed Goose (<i>Chloephaga rubidiceps</i>)	November 2006	Argentina and Chile
Memorandum of Understanding on the Conservation of Southern South American Migratory Grassland Bird Species and Their Habitats	August 2007	Argentina, Bolivia, Paraguay and Uruguay
Memorandum of Understanding on the Conservation and Management of Dugongs (<i>Dugong Dugon</i>) and Their Habitats Throughout Their Range	October 2007	Australia, Comoros, Eritrea, France, India, Kenya, Madagascar, Myanmar, the Philippines, the United Arab Emirates and Tanzania
Memorandum of Understanding Concerning the Conservation of the Manatee and Small Cetaceans of Western Africa and Macaronesia	October 2008	Western Africa and Macaronesia: Benin, Côte d'Ivoire, Equatorial Guinea, Gambia, Guinea, Senegal and Togo
Memorandum of Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia	November 2008	The 28 Range States: Angola, Armenia, Burundi, Chad, Congo, Democratic Republic of Djibouti, Equatorial Guinea, Finland, Gambia, Guinea, Hungary, Kenya, Madagascar, Mali, Mongolia, Morocco, Nepal, the Netherlands, Norway, Pakistan, Portugal, Senegal, Sudan, Togo, the United Arab Emirates, the UK, Yemen and South Africa
Memorandum of Understanding Concerning Conservation Measures for the Eastern Atlantic Populations of the Mediterranean Monk Seal (<i>Monachus monachus</i>)	Signed October 2007, not yet in force	Mauritania, Morocco, Portugal and Spain
Memorandum of Understanding on the Conservation of High Andean Flamingos and their Habitats	Signed December 2008, not yet in force	Argentina, Bolivia, Chile and Peru
Source: CMS website.		

So far, seven international legally binding agreements and 17 MOUs on specific species have been concluded between different Range States. The species that these agreements and MOUs currently aim to conserve are shown in Tables I-4 and I-5.

216

5.2 Regional instruments

- 217 This section highlights the major regional environmental treaties that are directly relevant for protected areas in the regions of Africa, Europe and the Western Hemisphere. The Regional Seas Programme, another group of regional treaties covering 18 regions of the world, is discussed in Part III, Chapter 2, section 3.3, in relation to MPAs.
- 218 There are numerous regional law instruments operating worldwide. In environment-related fields alone, ECOLEX currently contains 423 regional entries in its treaty database. Some of these regional instruments spell out important commitments and guidance for protected area legal frameworks. Many of these commitments, as with global treaties, generate national obligations that require legislative action for implementation. It is important for the legal drafter working with protected area authorities to identify and incorporate these commitments, as appropriate, within the national protected areas legal framework.

5.2.1 Africa: African Convention on the Conservation of Nature and Natural Resources (revised)

Basic data: Concluded in 2003, not yet in force; 8 ratifications, 15 required

Website: <http://www.africa-union.org/root/au/Documents/Treaties/treaties.htm>

Objectives: To enhance environmental protection; to foster the conservation and sustainable use of natural resources; and to harmonize and coordinate policies in these fields with a view to achieving ecologically rational, economically sound and socially acceptable development policies and programmes (Art. II).

- 219 In 2003, heads of state and government of the African Union adopted a revised African Convention on the Conservation of Nature and Natural Resources which significantly updates and expands the scope of its predecessor of the same name (which was also called the Algiers Convention) concluded in 1968. The revised Convention is a modern reflection of the significant international environmental law experience that has been gained since 1968, including in the field of biological diversity and protected areas. As such, it serves as the current statement of protected areas policy and law at the regional level in Africa. The African Union serves as the Secretariat.
- 220 **Relevance for protected areas law.** The Convention incorporates several international principles of protected areas conservation as well as important globally recognized good governance principles related to access to information, participation and environmental justice. For African countries, legal drafters working with protected area authorities should be familiar with the entire Convention, even though it is not yet in force. This is critically important because adoption of the revised Convention by consensus at the highest level of the African Union constitutes an important commitment for the African continent on environmental issues, including biological diversity, in the context of sustainable development. Four aspects of the convention that particularly reinforce emerging principles worldwide for protected areas are highlighted here.
- 221 First, the Convention incorporates provisions of the CBD related to in-situ conservation and the establishment of protected areas, and links this obligation to IUCN's protected area management categories. Specifically, Article XII states that Parties "shall establish, maintain and extend, as appropriate, conservation areas." The term 'conservation area' is defined as any protected area designated and managed mainly or wholly as one of the protected area categories as provided in the IUCN Guidelines for Protected Areas Management Categories (1994). These categories are enumerated in Annex 2, which forms part of the definition of the term 'conservation area(s)'.

Second, Article XII calls upon Parties to establish other conservation areas with specific purposes in order to ensure long-term biodiversity conservation: 222

[Parties] shall, preferably within the framework of environmental and natural resources policies, legislation and programmes, also assess the potential impacts and necessity of establishing additional conservation areas and wherever possible designate such areas, in order to ensure the long term conservation of biological diversity, in particular to:

- a) conserve those ecosystems which are most representative of and peculiar to areas under their jurisdiction, or are characterized by a high degree of biological diversity;
- b) ensure the conservation of all species and particularly of those which are:
 - i) only represented in areas under their jurisdiction;
 - ii) threatened, or of special scientific or aesthetic value;

and of the habitats that are critical for the survival of such species (Art. XII(1)).

Recognizing another important protected areas principle, the Convention also gives explicit attention to the important role of local communities in protected area development and management. Article XII states that Parties shall “promote establishment by local communities of areas managed by them primarily for the conservation and sustainable use of natural resources” (Art. XII(2)). Further, Article XVII addresses the need to protect indigenous knowledge and the traditional rights of local communities. It provides that Parties shall: 223

take legislative and other measures to ensure that traditional rights and intellectual property rights of local communities including farmers’ rights are respected [...]

require that access to indigenous knowledge and its use be subject to [...] prior informed consent [and]

take measures to enable active participation of local communities in the process of planning and management of natural resources upon which such communities depend with a view to creating local incentives for conservation and sustainable use of such resources.

A fourth principle focuses on the need for compatible land uses outside established conservation areas, and for strategies to sustain broader ecological processes. Article XII provides that: 224

Parties shall, where necessary and if possible, control activities outside conservation areas which are detrimental to the achievement of the purpose for which the conservation areas were created, and establish for that purpose buffer zones around their borders (Art. XII(4)).

The Convention also calls for the development of land use plans based on scientific information and local knowledge, as well as long-term integrated strategies for the conservation and sustainable management of land resources including soil, vegetation and related hydrological processes (Art. VI).

5.2.2 Europe: Convention on the Conservation of European Wildlife and Natural Habitats

Basic data: Concluded in 1979, entered into force 1982, 50 Contracting Parties

Website: http://www.coe.int/t/dg4/cultureheritage/nature/bern/default_en.asp

Objectives: To conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the cooperation of several states, and to promote such cooperation, with particular emphasis on endangered and vulnerable species, including endangered and vulnerable migratory species (Art. 1).

The Convention on the Conservation of European Wildlife and Natural Habitats (known as the Bern Convention), adopted in Bern, Switzerland, was negotiated by the Council of Europe (CoE) which serves as the Secretariat. The treaty is open for signature by member states of the CoE, non-member states that have participated in its elaboration and the EU, and for accession by other non-member 225

states. The 50 Parties are comprised of the 44 member states of the CoE, 5 non-member states, and the EU. Member states of the CoE that are not Parties may be observers to the Convention.

226 **Relevance for protected areas law.** The Bern Convention has two principal substantive chapters with direct implications for national protected area legal frameworks: Chapter 2 on ‘Protection of Habitats’ and Chapter 3 on ‘Protection of Species’.

227 For the purposes of protected areas legislation in countries that are Contracting Parties, Chapter 2 is particularly important. This Chapter requires each Contracting Party to:

take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in Appendices I and II, and the conservation of endangered natural habitats (Art. 4(1)).

Moreover, Contracting Parties are required to avoid or minimize, in their broader planning and development policies, any deterioration of such protected areas by having regard to the conservation requirements of the areas; to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III; and to coordinate these efforts when such areas are situated in frontier areas (Art. 4(2)–4(4)).

228 In an effort to advance implementation, in 1989 the Standing Committee of the Convention issued recommendations for the development of a network of areas of special conservation interest (ASCIs), which came to be called the Emerald Network. The Committee recommended that Parties take steps to designate ASCIs in order to ensure that the necessary and appropriate conservation measures are implemented for each area situated within their territory or under their responsibility, where that area fits one or several listed conditions:

- (a) It supports significant numbers of species in an area of high species diversity, or supports important populations of one or more species.
- (b) It contains an important or representative sample of endangered habitat types.
- (c) It contains an outstanding example of a particular habitat type or a mosaic of different habitat types.
- (d) It represents an important area for one or more migratory species.
- (e) It otherwise contributes substantially to the achievement of the objectives of the Convention (Bern Convention SC 1989 No. 16).

229 Both Contracting States and observer states are encouraged to designate ASCIs and to notify the Secretariat to that effect. While this is a non-binding recommendation, obligations under the Bern Convention to protect the habitats of species and endangered natural habitats are clear and rigorous. The network concept provides structure and guidance on priorities for implementation.

230 In 1992, the EU adopted the Habitats Directive and subsequently set up the Natura 2000 network (see section 5.3, below). In 1998, the Standing Committee of the Bern Convention adopted a resolution stipulating that for Contracting Parties that are member states of the EU, the Emerald Network sites are those of the Natura 2000 network (Bern Convention SC 1998 No. 5). The basic principles of the two networks are the same, and the Emerald Network allows extension to non-EU countries. (These two networks are important transboundary conservation initiatives and are discussed further in Part IV, section 4.6, which addresses the legal aspects of transboundary protected areas.)

5.2.3 The Americas: Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere

Basic data: Concluded in 1940, entered into force in 1942; 19 Contracting Governments

Website: <http://www.oas.org/juridico/english/sigs/c-8.html>

Objective: The primary objective is for governments of the region “to protect and preserve in their natural habitat representatives of all species and genera of their native flora and fauna, including migratory birds” (Preamble, para. 1).

The Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (commonly known as the Western Hemisphere Convention) is the longest standing regional conservation treaty. It is primarily focused on the establishment of protected areas, and the protection of wild flora and fauna through in-situ conservation. Twenty-two countries have signed the Convention and 19 have ratified. It remains the only umbrella convention for conservation in the Western Hemisphere, and continues today to be used as a guide for national protected areas legislation and, in some cases, directly as a basis for judicial decisions supporting protected areas. 231

It should be noted that for legal drafters in Central America, a more recent accord specifically for biodiversity conservation and protected areas is the Convention for the Conservation of the Biodiversity and the Protection of Wilderness Areas in Central America (Convenio para la Conservación de la Biodiversidad y Protección de Áreas Silvestres Prioritarias en América Central), concluded in 1992 and entered into force in 1995. 232

Relevance for protected areas law. The oldest of the regional conservation treaties, the Western Hemisphere Convention contains provisions on the broad responsibilities and rights of Contracting Parties, which remain relevant today as a guide for domestic legislation. Some of these provisions contain general mandates and others are more detailed. 233

The main substantive provisions relevant here call for establishing protected areas. Article II provides that Contracting Parties will establish, as soon as feasible, national parks, national reserves, nature monuments or strict wilderness reserves, and notify the Pan American Union of such establishment and the legislation adopted in that connection. Four categories of protected areas are defined (Art. I), all of which continue to have relevance and meaning in the region today: 234

1. The expression national parks shall denote:

Areas established for the protection and preservation of superlative scenery, flora and fauna of national significance which the general public may enjoy and from which it may benefit when placed under public control.

2. The expression national reserves shall denote:

Regions established for conservation and utilization of natural resources under government control, on which protection of animal and plant life will be afforded in so far as this may be consistent with the primary purpose of such reserves.

3. The expression nature monuments shall denote:

Regions, objects, or living species of flora and fauna of aesthetic, historic or scientific interest to which strict protection is given. The purpose of nature monuments is the protection of a specific object, or a species of flora or fauna, by setting aside an area, an object, or a single species, as an inviolate nature monument, except for duly authorized scientific investigations or government inspection.

4. The expression strict wilderness reserves shall denote:

A region under public control characterized by primitive conditions of flora, fauna, transportation and habitation wherein there is no provision for the passage of motorized transportation and all commercial developments are excluded.

- 235 The Convention requires that the boundaries of national parks shall not be altered or alienated in any part except by the competent legislative authority (Art. III). Moreover, it prohibits hunting, killing, capturing or collecting wildlife in those protected areas designated as national parks except by or under the direction or control of the park authorities, or for duly authorized scientific investigations (Art. III). In all areas, hunting of protected species listed in an Annex to the Convention is prohibited. Strict wilderness areas are considered “inviolate, as far as practicable”, with only authorized scientific research, government inspection or other uses consistent with those purposes (Art. IV).
- 236 In addition, the Convention reaches beyond these formal protected areas to promote conservation across the landscape. Article V(2) provides:

The Contracting Governments agree to adopt or to recommend that their respective legislatures adopt, laws which will assure the protection and preservation of the natural scenery, striking geological formations, and regions and natural objects of aesthetic interest or historic or scientific value.

5.3 European Union: Habitats and Birds Directives (Natura 2000 Network)

Basic data: Habitats Directive (1992) applies to all Member States of the EU which number 27; Birds Directive (1979, as amended in 2009) applies to all of the EU except Greenland

Website: http://ec.europa.eu/environment/nature/legislation/index_en.htm

Objectives: The objective of the Birds Directive is the conservation of all species of naturally occurring birds in their wild state (including eggs, nests and habitats) in the European territory of the member states. It covers the protection, management and control of these species and lays down rules for their exploitation (Art. 1). The main aim of the Habitats Directive is “to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements”, and to make a contribution to the general objective of sustainable development where “the maintenance of such biodiversity may in certain cases require the maintenance, or indeed the encouragement, of human activities” (Preamble).

- 237 The EU programme, Natura 2000, is a network of protected areas across the EU, established under the Birds Directive and the Habitats Directive, to ensure protection of the most seriously threatened terrestrial and marine habitats and species. These Directives form the cornerstone of Europe’s nature conservation and biodiversity policy. Through the Natura 2000 programme, a network of protected sites has been put in place to advance the objectives of the two Directives.
- 238 **Relevance for protected areas law.** The Directives require Member States to establish special protection areas (SPAs) for birds, and special areas of conservation (SACs) for other species and for habitats that are sites of community importance (SCIs). No European Commission approval is required for the designation of SPAs. For SACs, Member States must select sites according to the scientific criteria established by the Habitats Directive and submit them to the Commission for approval. When Member States have made their proposals, the Commission enacts a list of SCIs. Such sites are subject to protection from land uses that may be detrimental to the species and habitat values of the site (Art. 6(2)).
- 239 Under the Habitats Directive, Member States designate SACs with a view to maintaining or restoring to a favourable conservation status natural habitat types and habitats of ‘species of Community interest’. These sites form a core part of the Natura 2000 network (Art. 4). The Directive also lists natural habitat types of Community interest whose conservation requires the designation of SACs (Annex I). Once a site has been accepted by the Commission, the Member State concerned is required to designate the site as an SAC within its national system.

In exceptional cases, the Commission may also initiate proposals to protect particular sites in a Member State. Procedures are laid out to allow the Commission to designate such sites, which have not been proposed by a Member State but which the Community considers essential for the maintenance or the survival of a priority natural habitat type or a priority species (Art. 5). During deliberations, the Member State is obliged to take appropriate steps to avoid deterioration of the site. 240

For SACs, Member States must establish the necessary conservation measures including, as needed, appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the site and management plans (Art. 6). These include appropriate measures to avoid deterioration of the site or disturbance of the species for which the site has been designated, and to clearly and precisely define and assign surveillance (Art. 11, 14) and monitoring obligations. Habitats Directive provisions have been determined by the European Court of Justice to apply even where the Member State has not sufficiently reflected them in national legislation (see, for example, Case C-127/02, ECJ, 7 September 2004; and Case C-6/04, ECJ, 20 October 2005). 241

Member States are required to make assessments of the potential impact of proposed activities outside a selected site to ensure that those activities do not adversely affect the integrity of the site being protected (Art. 6). One of the most important provisions requires Member States to integrate nature conservation considerations in all land use policies and actions. States are to refuse any plan or project that could significantly harm a Natura 2000 site, except for an overriding public purpose where no alternative can be found and if ecological compensation is provided (Art. 6(3), 6(4)). 242

6 UNESCO Man and the Biosphere Programme

Website: http://portal.unesco.org/science/en/ev.php-URL_ID=6433&URL_DO=DO_TOPIC&URL_SECTION=201.html

Objectives: The Man and the Biosphere Programme targets the ecological, social and economic dimensions of biodiversity loss, and the reduction of this loss using its World Network of Biosphere Reserves for knowledge sharing, research and monitoring, education and training, and participatory decision making.

Biosphere reserves are areas of terrestrial and coastal ecosystems organized into three interrelated zones: a core area, a buffer zone and a transition zone. The UNESCO Man and the Biosphere (MAB) Programme's World Network of Biosphere Reserves represents the framework within which national sites may be designated as biosphere reserves. There is no international treaty governing the Network. However, the Statutory Framework of the World Network of Biosphere Reserves (UNESCO, 1995) has been accepted by all UNESCO member states and functions as the legal framework to guide states with the development of biosphere reserves to be designated as part of the World Network. Designations must be approved by the MAB International Coordinating Council (ICC) based on defined criteria in the Statutory Framework, and unsuitable areas may be refused. 243

Today there are over 500 biosphere reserves in more than 100 countries. They are considered by IUCN and the world protected areas community as one of the key tools for linking protected areas to surrounding ecosystems and designing integrated landscape management to support protected areas (IUCN-WPC 2003 V.9). Most countries now have a designated biosphere reserve or are contemplating creating at least one biosphere reserve to become part of the World Network. Each biosphere reserve has its own system of governance to ensure it meets its functions and objectives, and establishment is voluntary. Incentives for the designation of a biosphere reserve as part of the World Network include international recognition, technical assistance and donor support. 244

- 245 **Relevance for protected areas law.** States are encouraged to include biosphere reserves in their legislation. All core areas should be legally constituted and devoted to long-term protection, according to the conservation objectives of the biosphere reserve. States are also encouraged to designate the buffer zones of biosphere reserves as protected areas, either in whole or in part. IUCN category V areas (protected landscapes and seascapes) are particularly applicable as buffer zones for biosphere reserves. The legal drafter should keep in mind specific considerations related to national protected areas being recognized as part of the World Network of Biosphere Reserves. In 1995, the UNESCO General Conference adopted the Seville Strategy for Biosphere Reserves and Statutory Framework of the World Network of Biosphere Reserves. The Strategy and Statutory Framework established the biosphere reserve as a landscape- and seascape-level designation that could be conferred by the MAB Programme on natural ecosystems as well as areas significantly modified by humans.
- 246 **Seville Strategy and Statutory Framework.** The Seville Strategy for Biosphere Reserves and Statutory Framework of the World Network of Biosphere Reserves were negotiated among member states of UNESCO and adopted by the UNESCO General Conference in 1995 (see UNESCO, 1995). They update and expand policy and law guidance associated with the designation of biosphere reserves as part of the World Network. The Statutory Framework is particularly important in relation to these protected areas legislation guidelines because it lays out key functions, criteria and designation procedures for states to apply for their biosphere reserves to qualify for designation as part of the World Network. Biosphere reserves are defined as areas of terrestrial, coastal or marine ecosystems, or a combination thereof, which are internationally recognized within the framework of UNESCO's MAB Programme in accordance with requirements laid out in the Statutory Framework (Art. 1).
- 247 To become part of the World Network, a biosphere reserve should serve three mutually reinforcing functions (Art. 3):
- conservation: contribute to the conservation of landscapes, ecosystems, species and genetic variation;
 - development: foster economic and human development which is socio-culturally and ecologically sustainable;
 - logistic support: support for demonstration projects, environmental education and training, research, and monitoring related to local, regional, national and global issues of conservation and sustainable development.
- 248 According to criteria laid out in the Statutory Framework (Art. 4), management of a biosphere reserve must be based on a zoning concept that includes three sub-areas or zones:
- A legally constituted core area or areas, devoted to long-term protection in accordance with the conservation objectives of the reserve, and of sufficient size to meet these objectives.
 - A buffer zone or zones, clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives of the core zone may take place.
 - An outer transition zone, where sustainable resource management practices are promoted and developed.
- 249 Countries decide how they will frame their legal instruments for the purposes of each of these zones. Nevertheless, the criteria require that core areas need legal protection appropriate for their conservation function. Thus, they could correspond to an existing protected area such as a nature reserve, national park or MPA. Moreover, it is understood that certain activities inside a buffer zone will need to be limited in order to safeguard the conservation objectives of the core area, and that this will normally involve some legal or administrative controls on use of the land or sea, or their resources, adjacent

to the core area, an element also standard in modern protected areas legislation. In the transition zone, the integration of conservation with socio-economic activities normally involves special land use or resource management legal or administrative tools in order to support the overall goals of the reserve.

The Statutory Framework calls for a periodic review every 10 years of the status of each biosphere reserve (Art. 5). The purpose of the review is to verify that sites satisfy the criteria provided. It also serves as an opportunity for the authority concerned to work with local populations in reviewing designated zones and revising or redefining zones as needed. 250

Participation of all segments of society is also required. The lead paragraph of the Seville Strategy emphasizes that all levels of society and relevant disciplines are involved to make biosphere reserves effective. This includes “natural and social scientists; conservation and development groups; management authorities and local communities—all working together on this complex issue” (UNESCO, 1995, p. 1). The Strategy recognizes that the link between biodiversity conservation and the development needs of local communities is a central component of the biosphere reserve approach, a link now acknowledged as a key feature of the successful management of most protected areas. 251

Madrid Action Plan. In February 2008, the 3rd World Congress of Biosphere Reserves adopted the Madrid Action Plan for Biosphere Reserves 2008–2013 (UNESCO, 2008a), further advancing the Seville principles and requirements. The Madrid Action Plan identifies three emerging challenges for biosphere reserves: climate change, added stresses on ecosystems to provide basic services and urbanization as a principal driver of ecosystem-wide pressures. The Plan emphasizes the importance of biosphere reserves to serve as learning models for global, national and local sustainability in the face of these challenges. Among the 11 targets for action identified in the Madrid Action Plan, Target 11 calls for enhanced legal recognition for biosphere reserves where appropriate and action to encourage states to include biosphere reserves in their own legislation (UNESCO, 2008a, p. 16). 252

7 International policy and guidance

This Part closes with examples of international instruments that are referred to as quasi-legal or ‘soft law’. This is because such instruments do not have legally binding force and have a ‘weaker’ effect than international treaty law, which is often called ‘hard law’ in contrast. 253

Most international practitioners have come to accept soft law instruments for their potential to move forward international negotiations where the parties might be reluctant or not ready to sign a legally binding agreement. In some situations, such instruments may serve as the first step towards a treaty-making process or, through extensive use, may come to be accepted as customary international law. Soft law also has the advantage of being viewed as a flexible option, avoiding the immediate need for commitment by treaty. Reliance on soft law is likely to become greater as international challenges, such as climate change, become more complex and controversial. 254

Soft law instruments in the field of environmental law, including those related to protected areas, have become abundant and increasingly important since the 1970s. The goals, aspirations and principles contained in many of these instruments represent continued and strengthened global commitments. As such, they provide a strong foundation for national policy formulation and goals, which set out the rationale for specific objectives and substantive elements of protected areas legislation. The global instruments noted below are useful for the legal drafter in that context. 255

7.1 Stockholm Declaration and Principles

256 The classic soft law instrument in the field of environment is the Declaration of the United Nations Conference on the Human Environment (1972), commonly known as the Stockholm Declaration. The Stockholm Conference, held in 1972, was the first global environmental conference of nations. It launched the modern field of environmental law and has motivated many activities since, from constitutional development and reform to international, regional and national environmental law and policy. The Conference generated 26 principles to “inspire and guide the peoples of the world in the preservation and enhancement of the human environment”. These principles have been consistently reaffirmed and sustained in subsequent global policy instruments. Three of these principles are particularly relevant as foundation concepts for protected areas policy and law:

Principle 2

The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

Principle 3

The capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved.

Principle 4

Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat, which are now gravely imperilled by a combination of adverse factors. Nature conservation, including wildlife, must therefore receive importance in planning for economic development.

7.2 World Charter for Nature

257 Since the 1972 Stockholm Declaration, additional environment-related principles have entered the global mainstream. In 1982, for instance, the UN General Assembly adopted and solemnly proclaimed the World Charter for Nature, comprised of 24 principles of conservation by which all human conduct affecting nature is to be guided and judged. The Charter was prepared by IUCN at the request of the President of Zaire during the 12th IUCN General Assembly (Kinshasa, 1975). Once it had been transmitted as a Draft World Charter for Nature, the UN General Assembly adopted a resolution inviting member states to make comments. In accordance with that resolution, UNEP convened an ad hoc expert group to prepare a revised draft based on comments. The final version of the World Charter for Nature proclaims five core principles of conservation that are particularly important as underlying principles for protected areas policy and law:

1. Nature shall be respected and its essential processes shall not be impaired.
2. The genetic viability on the earth shall not be compromised; the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival, and to this end necessary habitats shall be safeguarded.
3. All areas of the earth, both land and sea, shall be subject to these principles of conservation; special protection shall be given to unique areas, to representative samples of all the different types of ecosystems and to the habitats of rare or endangered species.
4. Ecosystems and organisms, as well as the land, marine and atmospheric resources that are utilized by man, shall be managed to achieve and maintain optimum sustainable productivity, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist.
5. Nature shall be secured against degradation caused by warfare or other hostile activities.

7.3 World Commission on Environment and Development

In 1983, roughly 10 years after Stockholm, the UN General Assembly decided to create an independent WCED to take stock of environmental progress to date and give direction for the future. The Commission's mandate was to propose long-term environmental strategies for achieving sustainable development to the year 2000 and beyond (UN GA 1983 A/RES/38/161). Reflecting the global stature of this initiative, the Prime Minister of Norway, Gro Harlem Brundtland, was appointed Commission Chair (the Commission became known as the Brundtland Commission). An additional 22 distinguished individuals, roughly half of whom were from developing countries, were appointed to make up the body of the Commission. An Experts Group on Environmental Law was set up which included leadership from the IUCN Environmental Law Commission. The final report, issued in 1987, was entitled *Our Common Future* (WCED, 1987). 258

One of the most lasting impacts of the WCED report was its discussion of the meaning of sustainable development, integrating the concept throughout the report's analysis and final recommendations. The Commission identified sustainable development as the ability of humanity "to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, p. 8). The concept has permeated international law and practice to such an extent that some practitioners view it as a concept that is now recognized in customary international law. Use of the term has gradually expanded to three constituent and interrelated parts: environmental sustainability, economic sustainability and societal sustainability. 259

For modern protected area systems and the legal and policy framework they require to function effectively, the role of protected areas in advancing sustainable development has become a prominent theme and driving motivation for protected area establishment and management. Today, sustainable development is a common reference in modern protected areas legislation as one of the goals for protected area systems. 260

The WCED process generated additional soft law principles through recommendations made by the Experts Group on Environmental Law. In addition to incorporating inputs from the Experts Group, the final report included a Summary of Proposed Legal Principles for Environmental Protection and Sustainable Development (WCED 1987, Annex 1) adopted by that group. These principles are especially relevant for legal drafters because they were produced by legal experts and represent, in the consensus view of those experts, legal principles to be applied in countries for sustainable development. Three of these principles are worth noting here, in particular, because they reinforce several of the legally applicable protected area management and governance principles discussed in this Part and incorporated in Part III as generic elements of modern protected areas legislation: 261

Conservation and Sustainable Use. States shall maintain ecosystems and ecological processes essential for the functioning of the biosphere, shall preserve biological diversity, and shall observe the principle of optimum sustainable yield in the use of living natural resources and ecosystems.

Prior Notification, Access and Due Process. States shall inform in a timely manner all persons likely to be significantly affected by a planned activity and to grant them equal access and due process in administrative and judicial proceedings.

Sustainable Development and Assistance. States shall ensure that conservation is treated as an integral part of the planning and implementation of development activities and provide assistance to other States, especially to developing countries, in support of environmental protection and sustainable development (WCED, 1987, pp. 348–349).

7.4 United Nations Conference on Environment and Development: Rio Declaration and Agenda 21

262 Some 20 years after Stockholm, the United Nations Conference on Environment and Development (UNCED, popularly called the Earth Summit), meeting in Rio de Janeiro in June 1992, issued two important soft law instruments: the Rio Declaration and Agenda 21, the latter also known as the 'earth's action plan'. These documents reaffirm the Stockholm Declaration and formally endorse its three interdependent and mutually reinforcing pillars of sustainable development: environmental sustainability, societal sustainability and economic sustainability.

263 Principle 10 of the Rio Declaration is worth noting in full because its elements play an important role throughout these protected areas legislation guidelines. It provides:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

264 Agenda 21, a comprehensive action plan adopted by participants, includes several elements also relevant for these protected areas legislation guidelines. Specifically, Chapter 15 on 'Conservation of Biological Diversity' is intended to support the CBD, and to promote the conservation of biodiversity and the sustainable use of biological resources generally. Its main focus on protected areas is in relation to in-situ conservation measures, including commitments to reinforce terrestrial, marine and aquatic protected area systems; promote the rehabilitation and restoration of damaged ecosystems and the recovery of threatened and endangered species; develop policies to promote conservation on private lands; establish buffer zones adjacent to protected areas to further protect such areas; introduce EIA procedures for proposed projects likely to have significant impacts on biodiversity; and promote, where appropriate, the establishment and strengthening of regulation or management and control systems related to biological resources at the appropriate level (UN, 1992, para. 15.5).

265 In addition, UNCED generated a statement of forest principles which has remained an important part of soft law in forest conservation. This statement, formally titled 'Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests' (UN, 1992, Annex 3), was a significant step for bringing conservation and sustainable development into the forest sector. The statement was not legally binding because efforts for a treaty dealing with forest conservation had not advanced. Among the 15 principles contained in that statement, two are especially relevant for protected forest areas law and policy:

- Forest management should be integrated with the management of adjacent areas so as to maintain ecological balance and sustainable productivity.
- National policies and legislation aimed at the management, conservation and sustainable development of forests should include the protection of ecologically viable representative or unique examples of forest, including primary or old-growth forests, and cultural, spiritual, historical, religious and other unique and valued forests of national importance (UN, 1992, Annex 3, principle 8(e), 8(f)).

7.5 Earth Charter

266 Motivated by the 1992 UNCED, two international NGOs, the Earth Council (founded in 1992 by Maurice Strong, the first UNEP Executive Director, and Secretary General of UNCED) and Green Cross International (launched by Mikhail Gorbachev in 1993), collaborated to develop the Earth Charter (2000). The purpose was to provide a set of ethical principles to guide action towards sustainable

development, based on core values such as respect and care for all life, ecological integrity, universal human rights, economic justice, democracy, and peace. In 2000, the Earth Charter was officially launched as a framework of 16 main principles and 61 supporting principles.

The Earth Charter currently has endorsements from 5,086 organizations worldwide, including commitments from national and international entities. Through these developments and the continued work of the Charter's secretariat, Earth Charter International, the document has become widely recognized as a global soft law statement on ethical principles for achieving sustainable development. The 2002 WSSD elicited several public statements by world leaders in support of the Earth Charter and incorporated one of the Charter's central themes related to responsibility to one another and all life on the planet. The 3rd IUCN World Conservation Congress in 2004 endorsed the Earth Charter and encouraged IUCN members "to determine the role the Earth Charter can play as a policy guide within their own spheres of responsibility" (IUCN-WCC 2005 3.022).

267

Two of the Earth Charter's 16 principles are directly relevant as baseline concepts for national protected areas law and policy. They relate to ecological integrity (principle 5) and governance (principle 13):

268

5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.

- a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.
- b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.
- c. Promote the recovery of endangered species and ecosystems.
- d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.
- e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.
- f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage. [...]

13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.

- a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest.
- b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making.
- c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent.
- d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm.
- e. Eliminate corruption in all public and private institutions.
- f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.

7.6 World Summit on Sustainable Development

Some 10 years after UNCED, the 2002 UN World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, reaffirmed the Rio Principles in the Johannesburg Declaration on Sustainable Development (2002). The Declaration proclaimed "environmental protection" as one of the three reinforcing pillars of sustainable development—along with economic development and social development—at the local, national, regional and global levels (para. 5). On a global scale, the Johannesburg Declaration recognized that the environment was one of the key challenges facing the world's nations in their commitment to sustainable development, characterizing that challenge in this way:

269

The global environment continues to suffer. Loss of biodiversity continues, fish stocks continue to be depleted, desertification claims more and more fertile land, the adverse effects of climate change are already evident, natural disasters are more frequent and more devastating, and developing countries more vulnerable, and air, water and marine pollution continue to rob millions of a decent life (para. 13).

270 The WSSD also adopted a Plan of Implementation to support the Johannesburg Declaration, which included a call for strong and concrete action for ocean conservation and for establishing MPAs. The Plan set a target of 2012 for building representative networks of MPAs, a target which was incorporated in the CBD Programme of Work on Protected Areas two years later. The relevant WSSD Plan provision is:

32. In accordance with chapter 17 of Agenda 21, promote the conservation and management of the oceans through actions at all levels, giving due regard to the relevant international instruments to: [...]

(c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors.

7.7 Sustainable forest management

271 Soft law documents from the United Nations Forum on Forests (UNFF) have built on and further developed the Rio Forest Principles, discussed in section 7.4, above. In October 2000, the United Nations Economic and Social Council (ECOSOC) passed a resolution establishing the UNFF, a subsidiary body with the main objective to promote “management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end” (ECOSOC 2000 2000/35, para. 1). As stated further in this resolution:

The purpose of such an international arrangement is to promote the implementation of internationally agreed actions on forests, at the national, regional and global levels, to provide a coherent, transparent and participatory global framework for policy implementation, coordination and development, and to carry out principal functions, based on the Rio Declaration on Environment and Development, the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests (Forest Principles), chapter 11 of Agenda 21 and the outcome of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests Process, in a manner consistent with and complementary to existing international legally binding instruments relevant to forests (ECOSOC 2000 2000/35, para. 1).

The Forum has universal membership and is composed of all UN Member States as well as specialized agencies.

272 An important recent output from the Seventh Session of the Forum in 2007 was the adoption of the ‘Non-legally binding agreement on all types of forests’ (ECOSOC 2007 2007/40). This instrument is considered a milestone because it marks the first time that all Member States came together and agreed to make an international commitment to sustainable forest management. Among its global objectives is to “increase significantly the area of protected forests worldwide and other areas of sustainably managed forests” (ECOSOC 2007 2007/40, part IV, objective 3). Importantly for national protected areas legislation, the bulk of the agreement consists of actions Member States agree to take with respect to national policies and measures, including to:

(p) Create, develop or expand, and maintain networks of protected forest areas, taking into account the importance of conserving representative forests, by means of a range of conservation mechanisms, applied within and outside protected forest areas;

(q) Assess the conditions and management effectiveness of existing protected forest areas with a view to identifying improvements needed;

(r) Strengthen the contribution of science and research in advancing sustainable forest management by incorporating scientific expertise into forest policies and programmes (ECOSOC 2007 2007/40, part V, para. 6).

273 For countries with forest conservation as an important part of national policy, it is worthwhile for the legal drafter and protected area authorities to monitor progress of this forum for continuing developments on guiding principles and commitments, including on national law and policy for protected forest areas.

7.8 Sustainable fisheries management

In many countries, fisheries legislation includes provisions for marine conservation and management, including through no-take zones and areas managed for sustainable use of fisheries (for example, IUCN category VI areas). International laws and principles for sustainable fisheries reinforce many elements important for MPAs and associated buffers and marine corridors throughout coastal states' ocean zones. 274

Fish Stocks Agreement. This Agreement under UNCLOS is formally titled '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' (1995). It requires states to protect biodiversity and the marine environment, and calls for the precautionary approach in living marine resource use in furtherance of the goal of long-term sustainable use of straddling and highly migratory fish species. 275

Code of Conduct for Responsible Fisheries. This Code was adopted by the FAO in 1995 to promote long-term sustainable fisheries. As such, it contains important principles that can be used by the legal drafter and protected area managers to reinforce fisheries management and conservation measures that may be needed in MPAs. These principles take on the force of 'hard' law when incorporated into national legislation related to the conservation of marine habitat and species. 276

Among the Code's important general principles for the purposes of fisheries conservation and management control within MPAs are the following: 277

6.1 States and users of living aquatic resources should conserve aquatic ecosystems. The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources. [...]

6.5 States and subregional and regional fisheries management organizations should apply a precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking account of the best scientific evidence available (FAO, 1995).

An additional initiative of the FAO is worth noting in the context of these guidelines and with respect to the establishment of MPAs for fisheries management. In 2007, the FAO issued a report on a 2006 workshop on the use of MPAs as a fisheries management tool (FAO, 2007). The workshop was convened for the purpose of providing background information for developing technical guidelines. The workshop generated a number of recommendations that have legal relevance for MPAs and their role in fisheries management on an international and regional scale. These include an emphasis on the ecosystem approach, integrated coastal management and a multi-sectoral approach within which all users are considered. 278

The workshop report identifies the need to provide objectives that might be applied to MPAs and MPA networks for the purposes of fisheries management and adaptive management. It also contains more detailed considerations such as definitions of management objectives and key factors for the successful implementation and evaluation of alternative options. Such concepts as stakeholder participation, evaluation, monitoring and communication with communities are also noted. Discussion of future directions for MPAs for fisheries management covers such issues as integration of fisheries management into broader management frameworks, MPAs in the high seas and the role of the relevant bodies such as regional fisheries management organizations. 279

Part II: Governance approaches

The main purpose of this Part is to elaborate issues and elements associated with the governance of protected areas. It focuses especially on the special considerations that new governance approaches raise for protected areas legislation and the legal issues to keep in mind for such arrangements to be recognized as part of formal protected area systems.

Introduction

This Part begins by providing context on the governance of protected areas and exploring the new policy directions involved. This is followed in section 3 by a discussion of the main approaches to protected areas governance, beginning with a brief review of the state-owned or state-controlled protected area, which is the baseline for protected areas legislation. Section 3 continues by elaborating on new governance approaches being promoted for inclusion in formal protected area systems. Section 4 surveys major international law and policy instruments, mostly associated with conservation conventions, that recognize and promote the inclusion of new governance approaches in formal protected area systems. Section 5 concentrates on the special legal considerations arising for new governance approaches to be included in formal systems. Part II concludes by highlighting some additional legal tools available to individuals and communities for securing their land or sea areas, or the resources from those areas, for long-term nature conservation, whether or not such areas become part of the formal protected areas system.

1

It is important to recall at the beginning of this Part how the phrase ‘formal protected areas system’ is used. The phrase is used throughout these protected areas legislation guidelines to mean the system of protected areas officially declared and established or recognized by the state, pursuant to protected areas legislation or by other effective means. It includes state-owned or state-controlled protected areas, as well as voluntarily conserved areas of indigenous or traditional peoples, local communities, corporations, non-governmental organizations (NGOs) and private individuals, as long as they meet the requirements for inclusion.

2

1 Context

The concept of governance has two dimensions (see Part I, section 4). One dimension involves the process by which decisions are made, or the quality of governance, also known as good governance. The second dimension concerns who makes decisions, regardless of the process used. Who makes decisions determines the governance approach or type of governance regime that will define overall management responsibility for a protected area. This Part turns to that dimension of governance.

3

The classic form of governance for protected areas has been and continues to be decision making by the state for all aspects of acquisition, establishment and management of areas designated as formal protected areas. This is because, historically, protected areas legislation and other legislation have given the state such powers. State-owned or state-controlled protected areas are known in some jurisdictions by other names such as conventional, government or public protected areas. Through the decades, the principles and obligations discussed in Part I were developed mainly from the worldwide

4

experiences and needs of these state-owned or state-controlled protected areas, which historically were the dominant governance approach and remain so today. New approaches to protected areas governance expand this focus, taking into account lands, waters or natural resources that are not state-owned or state-controlled.

- 5 In recent decades, there has been increasing focus on the need to expand formal protected area systems beyond the state-owned or state-controlled protected area. This trend has been motivated by heightened concerns among conservation scientists and managers about the alarming rate of biodiversity loss worldwide and the critical need to increase coverage of protected area systems to help achieve biodiversity goals. Consideration has been given, in particular, to the potential for recognizing voluntarily conserved areas and their associated governance arrangements as new governance approaches for protected areas that may be recognized as part of formal protected area systems. These approaches are being promoted and increasingly recognized by the international conservation community and many national governments.
- 6 Findings of case studies and other research indicate that indigenous and local communities, corporations, NGOs, and individuals worldwide are voluntarily conserving important biodiversity sites on lands they own or over which they have controlling rights. In parallel, the use of co-management (or shared governance) is expanding to many voluntarily conserved areas through partnerships between government agencies, NGOs and other non-governmental entities. For example, the Booderee National Park, a 6,300 hectare land and marine area in south-east Australia, is jointly managed by the Aboriginal community that has occupied the area for at least 20,000 years and the national protected areas agency under formal co-management governance arrangements and legislation (see the Booderee case study accompanying these guidelines: Farrier and Adams, 2010). In addition, voluntarily conserved areas may be managed for a wide range of purposes, such as village forests and pastures, sacred groves, restricted hunting and fishing areas, or private reserves with a variety of conservation and sustainable use objectives. Many such initiatives face greater threat than do formal protected areas because they are not legally recognized, supported by government programmes or even documented.
- 7 It is important for protected areas legislation to recognize new governance approaches to protected areas management. Many private and community areas managed for conservation may qualify to be recognized as part of the formal protected areas system, thus helping a country achieve its biodiversity conservation goals. Others may not qualify or the entities involved may not want to be part of the formal system but these voluntary efforts should still be recognized for the supportive role such areas play as buffers or connecting corridors, and for conserving high-value biodiversity.
- 8 Recognition of voluntarily conserved areas requires special legal considerations. These relate to the voluntary nature of such arrangements, the agreements that may be needed to secure commitments, the array of parties and possible partnerships involved, and the special incentives and monitoring structures that may be required. It is likely that most countries will have opportunities in the future to expand their formal protected area systems with new governance approaches. Where possible, protected areas legislation should incorporate supportive elements to address these special legal needs in order to enable protected area authorities to take full advantage of these opportunities. As a minimum, protected area legal frameworks should not hinder such possibilities by restricting powers or defining mandates so narrowly that the necessary tools for recognizing new governance options are lacking.

2 New policy directions

New governance approaches for protected areas was a dominant issue at the Vth IUCN World Parks Congress (WPC) in 2003. The topic was integrated throughout the resulting Durban Accord and Durban Action Plan. The theme of the Vth IUCN-WPC was ‘Benefits beyond Boundaries’. In the Durban Action Plan, participants adopted a ‘new directions’ agenda aimed at building synergies between conservation and all sectors of society by promoting voluntary conservation actions (IUCN-WPC 2004, p. 225). Interest in folding new governance approaches into protected area systems was motivated largely because of their potential to help meet global biodiversity goals, and the growing recognition that state-owned or state-controlled protected areas are no longer sufficient to address growing global threats to biodiversity and ecosystems. 9

It was reported at the Vth IUCN-WPC that voluntary initiatives could number in the thousands and protect millions of hectares of biologically important habitats. Some estimates suggest that less than 20 per cent of the planet’s terrestrial biodiversity needing protection lies within formal protected areas (ELI, 2003; Figgis, 2004). Estimates from the United Nations Environment Programme World Conservation Monitoring Centre indicate that formal protected areas cover only about 12 per cent of the earth’s surface. This means that a vast proportion of the earth’s biodiversity is found in areas that are not part of formal protected area systems. 10

The Vth IUCN-WPC took special note of scientific assessments indicating that protected area systems that combine different governance types are likely to be more resilient, responsive and adaptive under various near- and long-term threats to conservation, and hence will be more sustainable and effective in the long term (IUCN-WPC 2003 V.17). This is confirmed by a 2008 study analysing the participation of people living in the vicinity of protected areas in the management of those areas. The study, which included case studies from Africa, Asia, Europe and Latin America, observes that the shift to new governance approaches in these regions is grounded in the idea that nature conservation can be made more sustainable by sharing power with local people through the political process and “making local-level actors and groups able to define what is to be conserved” (Galvin and Haller, 2008). 11

Building on the work of the Vth IUCN-WPC, the IUCN Fourth World Conservation Congress (WCC) in 2008 called on countries to fully acknowledge the conservation significance of areas being conserved by indigenous peoples and local communities (IUCN-WCC 2009 4.049), and to recognize the importance of private protected areas (PPAs) (IUCN-WCC 2009 4.072). The 2008 IUCN World Commission on Protected Areas (WCPA) guidelines on protected area management categories recognize that any protected area category (IUCN categories I–VI) may apply to any new governance approach, just as any category may apply to state-owned or state-controlled protected areas (Dudley, 2008). 12

3 Governance approaches

Governance approaches for protected areas are proliferating. A 2008 assessment of policy and governance for protected areas identifies up to seven different typologies: “government agency, parastatal [statutory corporation], private for-profit company, public-private mix, private non-profit corporation, public contract to private companies, and mixed groups of institutions” (Hanna et al., 2007, p. 7). The assessment concludes: 13

Relationships between societies and protected areas are changing in important ways, and societies are not fixed constants either. As society changes, so will the functions and services demanded from protected areas [...]

Transforming parks and protected areas is probably necessary, in at least some contexts. In some cases, that might mean redefining boundaries, functions, and activities and infrastructure within them. More often, though, *it will probably mean new policies and more diverse, and often more complex, governance arrangements* (Hanna et al., 2007, pp. 222, 226; emphasis added).

- 14 There are many ways to characterize or group governance approaches. Because this is a relatively new field for protected areas and approaches are dynamic, any typology of governance should be viewed flexibly and with the understanding that it continues to develop and evolve. It is nevertheless useful to employ a rough typology of governance approaches as a framework for discussing special legal considerations, which may differ depending on the approach.
- 15 For the purposes of these protected areas legislation guidelines, the basic typology laid out in the 2008 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) is used as a framework for discussing special legal considerations related to new governance approaches. The 2008 IUCN-WCPA guidelines characterize protected areas governance as four broad types, as shown in Table II-1.

Table II-1: IUCN typology of protected area governance types

Type	Characterization as part of formal protected areas systems
Governance by government	Classic approach—state-owned or state-controlled
Governance by indigenous and local communities	New—voluntary conservation by indigenous and local communities
Governance by private property owners	New—voluntary conservation by private property owners (individual or corporate)
Co-management (shared governance)	Some elements are new—for example, arrangements expanded to partnerships with and among communities, NGOs, private individuals and corporations

Source: Adapted from Dudley, 2008, p. 26.

- 16 Because governance is dynamic and site-specific, this typology is best viewed as a set of ideal types. The first is the classic type where the state owns or controls the site and manages it as part of the formal protected areas system. Historically, protected areas legislation has been based on this classic approach for defining powers, processes, requirements, enforcement, offences and associated considerations. The second and third types (indigenous and local communities, and private owners) reflect the growing worldwide movement of voluntary conservation initiatives, and the fourth type (co-management) may involve any combination of the first three types.
- 17 It is important to stress that, in practice, voluntarily conserved areas and co-managed areas may not fit precisely into these idealized types. Moreover, governance arrangements for a particular site may change or adapt with time to new biophysical and social conditions. In large protected areas, there may be mixed ownership and governance arrangements, where state-owned lands may exist alongside private or community lands within the boundaries of a single site.
- 18 Following a brief review of the classic protected areas governance type (governance by government), the basic platform for all protected area legal frameworks, this section explores the new governance approaches reflected in IUCN’s typology.

3.1 Governance by government

Historically, the classic approach to protected areas governance has been governance by government, meaning usually that the land or sea involved is state-owned or state-controlled. Management is entirely the responsibility of the government, based on a distinct legal mandate. Worldwide, this remains the dominant governance approach for protected areas and will continue to serve as the foundation of most protected area systems in order for governments to fulfil global, regional and national commitments to conserve biodiversity. 19

In the classic protected area, the government makes decisions and is held directly accountable under the law. Normally, the lead government agency specializing in protected areas (for example, a department of conservation) or a statutory corporation (for example, a national parks trust) is given the operational powers and responsibilities necessary to establish and manage individual protected areas and the protected areas system in accordance with the relevant legislation. The public policy reflected in this approach is that such protected areas, when established by law, are managed and maintained by the government in public trust for the benefit of the people and for future generations as their natural heritage. 20

This governance approach may apply to all or most levels of government, including the provincial or state level in a federal state, as well as provincial, municipal or other local government levels where powers have been transferred or decentralized. In many countries with large protected area systems, there may be multiple layers of responsibility, each layer managing its system of protected areas consistent with national policy and local priorities. For example, in the US at the federal level alone there are currently more than 365 National Park Service areas on land and some 225 marine protected areas in the national system of marine protected areas. In addition, all 50 states have state 'public' protected area systems, and most counties and cities also have county and city public protected areas systems, all of which are managed by government agencies. Taking just one state as an example, the Florida State Park system contains some 160 protected areas considered public and managed by a state agency. 21

The government agency responsible for protected areas normally has significant discretion to delegate or assign certain responsibilities or services to other government or non-government entities by order, contract, concession, lease or other means. Final responsibility and accountability for the actions taken by those entities, however, remains with the specialized agency, the minister in charge or the government in general. 22

It is important to keep in mind that modern protected area management principles and the extensive body of international and regional law and policy related to protected areas have been developed and defined almost entirely by the many decades of experience and lessons derived from the classic state-owned or state-controlled protected area. Similarly, legal tools and legal frameworks for protected areas have developed and evolved, and been implemented, tested and challenged, based almost exclusively on experience with the establishment and management of state-owned or state-controlled protected areas. 23

It is only in recent decades that protected areas legislation and other legal instruments have begun to move beyond this classic approach to recognize other management and ownership arrangements. The foundation elements of protected areas legislation, as developed for state-owned or state-controlled protected areas, will continue to provide the framework going forward, amplified and enriched with new governance approaches as social systems advance and new management principles emerge in line with scientific discovery. 24

3.2 Voluntarily conserved areas: new governance approaches

- 25 Voluntary conservation initiatives come in many different forms, and with many different names, depending on local practice or the preferences of the communities or private landholders involved. Terminology to describe such areas includes sanctuary, refuge, community forest, village forest, community ecosystem reserve, locally managed marine reserve, ancestral domain, sacred grove (or lake or mountain), indigenous conservation area, indigenous reserve, indigenous protected area, private reserve, biological field station, protected migration area, wildlife game ranch, wilderness island, bio-cultural heritage site, corporate or family retreat, or reserve. Parties involved in voluntary conservation are motivated by different needs, interests, values and expectations. A variety of land tenure arrangements may exist, and a diverse array of parties and partners may be involved. Governance arrangements are specific to each case. There is no single recipe.
- 26 In this context, the discussion of voluntary conservation initiatives below is divided into initiatives of indigenous peoples and local communities, and initiatives of private property owners (whether corporate, NGO or individual). While there is no single approach to voluntary conservation, some legal considerations are common across all such initiatives when they are being considered for recognition as part of the formal protected areas system. These relate to ensuring, first, that the site meets the definition and standards to qualify as a protected area that is part of the formal system. Other important legal considerations involve preserving the primary conservation objectives of a site once it is included in the protected areas system, creating certainty as to the basic rights and responsibilities of all parties by formal agreement, identifying indicators to measure performance and accountability, providing for scientific monitoring, and including mechanisms to rectify breach of concluded agreements or malfeasance.
- 27 It should be stressed that most voluntarily conserved areas are not presently recognized as part of formal protected area systems. This may be because such recognition is not explicitly provided for in the legislation or thought to fall within its scope. It may be because the communities, corporations, NGOs or individuals practising conservation and sustainable use are not interested in participating in a formal protected areas system due to concerns about remaining independent. Moreover, some areas may not qualify for inclusion because they fail to meet the definition of a protected area or the essential conditions required, such as a commitment to long-term protection. Even so, such areas may bring significant benefits to a national or regional protected areas system as buffer zones, conservation corridors, or compatible landscapes or seascapes. They should be encouraged by protected areas legislation and supported by other legislation related to land and resource use.
- 28 Depending on the specific situation and the main concerns of the parties involved, governments have three broad choices with respect to including voluntary conservation initiatives in the formal protected areas system:
- Incorporating the voluntarily conserved area into the formal protected areas system when the protected area definition and other standards are fully met.
 - Recognizing the voluntary conservation initiative outside the formal protected areas system because of its supportive conservation role in the broader landscape or seascape.
 - Giving no formal recognition, either because the initiative does not meet the requirements for recognition, or because formal recognition may undermine or disturb the initiative, or because formal recognition is not desired by the private or community entities involved.

3.2.1 Governance by indigenous and local communities

One of the main new governance approaches for protected areas being promoted by IUCN and the international conservation community is governance by indigenous peoples or local communities over those land or sea areas to which they have ownership or resource use rights and which they are managing for long-term conservation. For governance purposes, this type of protected area has been characterized by IUCN and others as indigenous and community conserved areas (ICCAs). The term is meant to include both indigenous or traditional peoples' protected areas and community conserved areas, as well as indigenous conservation lands and other generally equivalent concepts, even though each arrangement may have distinct elements.

29

There is no clear data on the area that ICCAs cover worldwide. Some experts estimate that about 11 per cent of the world's forest ecosystems are under some form of community ownership or administration, and that this figure "could double in the near future due to increasing policies of decentralisation" (Kothari, 2006b, p. 4). ICCAs also occur in other ecosystems, for example, marine sites in the Philippines (see La Viña et al., 2010) and the islands of the South Pacific. Documentation from India indicates the presence of numerous ICCAs spread over many ecosystems, most of which remain largely unrecognized in the formal system (see Pathak, 2006; see also the India case study accompanying these guidelines: Pathak and Kothari, 2010). In size, ICCAs may range from a tiny forest patch of less than a hectare (for example, a sacred site) to several million hectares (for example, indigenous protected areas in some South American countries) (see Box II-1).

30

There are two possible relationships between ICCAs and the formal protected areas system that protected areas legislation should take into account. In many cases, ICCAs exist independently of the formal protected areas system and are not recognized as part of that system even though they fit the protected areas definition. Such areas are a contribution to conservation and should be promoted in protected areas legislation for their supportive role with respect to the formal system. In other cases, an ICCA may have become part of the formal protected areas system, if it has met the protected areas definition and other requirements for inclusion, and a formal agreement between the state and non-state parties involved has been concluded. For governance purposes, this latter type could still be considered an ICCA if decision-making powers remain predominantly with the community concerned. Otherwise, the governance approach could be characterized more in line with co-management or shared governance.

31

Distinguishing features. The 2008 IUCN-WCPA guidelines on protected area management categories identify ICCAs as having two subsets:

32

- indigenous peoples' areas established and run by indigenous peoples, and
- community conserved areas established and run by other local communities (Dudley, 2008).

These subsets apply to both sedentary and mobile peoples and communities (see Box II-2). In application, these subsets may not be neatly separated. Moreover, the entities involved may or may not have exclusive rights. Their initiatives may or may not be legally recognized by national governments as protected areas or other conservation areas. In India, for example, a vast and diverse array of ICCAs exist even though ICCAs are not recognized as a protected areas category under the current legal regime, which is comprised of a complex set of legal instruments and policies carried out by multiple institutions at central and state levels. While long-standing ICCAs rely largely on customary laws and rules for their protection, efforts are growing to give these communities statutory protection through nature conservation or other laws and policies (see India case study: Pathak and Kothari, 2010).

Box II-1: Community conserved areas in South America

The following examples of community conserved areas in South America illustrate different governance arrangements in place for ICCAs that are recognized protected areas.

Bolivia: Kaa-lya del Gran Chaco National Park and Integrated Management Natural Area (Parque Nacional y Area Natural de Manejo Integrado Kaa-lya del Gran Chaco)

The Kaa-lya National Park of Bolivia was declared in 1995. Spread over 3.5 million hectares, it is the largest national park in Bolivia and covers lands traditionally used by the indigenous Guarani. It is co-managed by the government and the Capitania del Alto y Bajo Izozog (the Upper and Lower Izozog Authority, or CABI) an indigenous Izoceno-Guarani organization. Kaa-lya is one of the most successful examples of indigenous peoples' protected areas in South America. One of the keys to its success is CABI's capacity to work with a range of partners including the government, international NGOs, other indigenous organizations, local governments and the private sector.

Brazil: Xingu Indigenous Park (Parque Indigena do Xingu, or PIX)

The Xingu Indigenous Park covers almost 3 million hectares in the Mato Grosso state of Brazil. It includes transitional ecosystems between the Amazon forest and cerrado (central lowland savannahs), and the Xingu river basin. The park shelters 14 indigenous peoples, for whom the Xingu river is a key cultural and environmental feature. Occupation and deforestation for ranching, soy bean monoculture and logging in the Xingu river watershed headsprings are the main issues of concern in the area. The headsprings are located outside indigenous lands but indigenous communities have been directly impacted by these activities. Indigenous communities of the park partner with several organisations to protect it. Although the park is still at risk, there is hope that this coalition will ensure its long-term protection.

Chile: Mapu Lahual indigenous protected areas in the southern coastal range

Chile's coastal temperate rainforest is a unique and threatened forest complex, one of the last temperate rainforests in the world. It contains outstanding biodiversity and extremely high levels of endemism. The area is the traditional homeland of the Mapuche-Huilliche indigenous people, who have conserved the largest tracts of native forest in the area. For them, the forest is populated by the 'spirit-owners' of nature (*ngens*), who take care of the different elements of the universe. Ensuring the integrity of the mountain forests, the spirits' homeland, is a guarantee of well-being for the communities. To this end, the Huilliche created six indigenous protected areas spread over 1,000 hectares, connected by a 52 km belt of forests, covering key ecosystems in the coastal range. These areas are managed by an indigenous organisation, known as the Mapu Lahual ('Land of Alerce') Network of Indigenous Parks. The alerce (*Fitzroya cupressoides*), a native tree recorded to live for more than 3,000 years, is a natural and cultural symbol of the area.

Colombia: Alto Fragua-Indiwasi National Park

The Alto Fragua-Indiwasi ('House of the Sun') National Park of Colombia was established in 2002, by agreement between the Colombian government and the Association of Ingano Councils. The first national park in Colombia created at the request of indigenous communities, it covers 68,000 hectares of land traditionally used by these communities in the headwaters of the Fragua river in the piedmont of the Colombian Amazon, one of the top biodiversity hot spots in the world. It is managed in accordance with the Ingano's worldviews and aspirations for the area and the people.

Ecuador: Awa Life Reserve

The Awa indigenous people are settled on both sides of the border between Ecuador and Colombia. The Awa region contains an unusually high level of biological diversity. It is also home to the main remaining example of western equatorial forests. The Awa Communal Settlement Forest Reserve was declared in 1988. It covers about 120,000 hectares of tropical forest, where the Awa communities practise sustainable forest management and protect the area. A reserve core zone of 17,000 hectares, containing a high diversity of endemic species, was designated by the communities as the Life Reserve, where human activities are strictly regulated.

Peru: Vilcanota Spiritual Park

The Vilcanota range is the second most important glacier system in the Peruvian Andes. It covers snow-capped peaks, steep slopes, deep canyons and isolated valleys that contain a rich diversity of microhabitats and species. Through a collective land tenure system, approximately 10,000 indigenous Q'eros manage a range of habitats located between 850 and 5,350 m above sea level. Management practices include rituals linked to ecosystem conservation of the highlands (*puna*), such as rituals that seek the bountiful production of pasture for alpacas.

Source: Adapted from Oviedo, 2006.

Box II-2: Protected areas and mobile peoples

Mobile peoples, as recognized by IUCN and other international organizations, are a subgroup of traditional and indigenous peoples. This is because the livelihoods of mobile peoples depend on extensive common property use of natural resources. Their mobility is both a management strategy for sustainable land use and conservation, because of the marginal and extreme landscapes on which they depend, as well as a distinct source of cultural identity (see IUCN-WPC 2003 V.27; IUCN-WCC 2005 3.018; and IUCN-WCC 2009 4.053). These peoples include nomadic and transhumant pastoralists, shifting agriculturalists, sea nomads, and hunter-gatherers, many with migration routes that cross national borders.

Land and marine areas traditionally used by mobile peoples exist in many parts of the world and many such areas overlap with existing or potential protected areas. In such instances, mobile peoples are key stakeholders whose livelihoods, concerns and capacities need to be taken into account when protected area decisions are made. Explicit reference in protected areas legislation is particularly important where affected mobile peoples' rights are based mostly on customary law, including oral traditions, that are not reflected in statutory (written) law. Multiple statutory and customary rights over parts of the same land and sea areas and resources may exist, and legal mechanisms are needed to resolve conflicts.

Examples of formal protected areas where mobile peoples have been included in management and co-management regimes include Sagarmatha (Mt. Everest) National Park in Nepal and the adjacent Qomolangma National Nature Preserve in China, Air and Tenere National Nature Reserve in Niger, Kayan Mentarang National Park in Indonesia (home of the Dayak people who practise rotational agriculture), and National Kuururjuaq Park in Canada (involving lands of the Naskapi peoples). In Thailand, co-management is being tested in some national parks inhabited by Karen peoples.

The transboundary migration of mobile peoples presents special legal challenges where protected areas are involved. Countries are testing various legal approaches to recognize mobile peoples' rights while sustaining an area's primary conservation objectives. For example, the W National Park, created in 1954 and covering parts of Benin, Burkina Faso and Niger, was designated as the W Transboundary Biosphere Reserve (TBR) in 2002. It includes lands used by pastoralists and their transhumant herds. Transboundary migration has been a sensitive issue for these governments for some time because of the negative impact caused by the annual migration of some 100,000 cattle. In 2004, following an extensive participatory negotiation process, the three states concluded a regional agreement to allow controlled pastoralist migration following strict rules so as not to jeopardize the conservation goals of the TBR core area. These rules include the marking of transhumance corridors and the development of specific grazing or transit areas. In 2008, a further agreement was concluded for cooperation in the management of the TBR, reasserting the continued effect of the control measures for pastoralist activities set out in the 2004 agreement (see the W TBR case study accompanying these guidelines: Michelot and Ouedraogo, 2010).

In some countries, legislation already recognizes the general right of mobile peoples to utilize their ancestral lands. While these laws focus on land use rights and the reduction of land and resource use conflicts, they also have potential to promote sustainable resource use practices. For example, the pastoral laws (*lois pastorales*) and pastoral codes (*codes pastoraux*) of Burkina Faso (2003), Guinea (1995), Mali (2001) and Mauritania (2004), as well as the rural code (*code rural*) of Niger (1993), recognize mobile peoples' rights to utilize their ancestral lands, including rights of passage, subsistence, and commercial and exclusive use of lands, forests and water. In Iran, the migratory routes of mobile pastoralists and customary nomadic tribal areas are legally protected, and some tribes have been assigned management authority over these routes, which include wetlands. In Mongolia, mobile pastoralist communities have co-management rights in certain areas of the Gobi Gurvan Saikhan National Park, gazetted in 1993.

At the international level, mobile peoples have begun to organize to promote their lifestyles. In 2003, the World Alliance of Mobile Indigenous Peoples was created on the occasion of the Vth IUCN-WPC. Comprised principally of mobile peoples' organizations and other concerned individuals and organizations, the Alliance's mission is to "assist and empower mobile peoples throughout the world to maintain their mobile lifestyles in pursuit of livelihoods and cultural identity, to sustainably manage their common property resources and to obtain the full respect of their rights" (WAMIP, 2009). The Alliance is an international association under Swiss law, and an affiliate of both the IUCN Commission on Environmental, Economic, and Social Policy (CEESP) and the IUCN World Commission on Protected Areas (WCPA).

Specifically with respect to protected areas, the international community has begun to acknowledge that mobile peoples have a role to play. The Convention on Biological Diversity (CBD) Programme of Work on Protected Areas gives nomadic communities and pastoralists special reference as stakeholders needing enabling legislation to promote their involvement in the establishment and management of protected areas, including community conserved and private protected areas (CBD COP 2004 VII/28, para. 2.2.4 and fn. 7). The IUCN-WCC in 2004 and again in 2008 requested IUCN and its Commissions to incorporate mobile peoples' needs and capacities in their work, identify lessons learned about ways to enhance mobile peoples' conservation role including through community conserved areas on migration lands, and develop conservation policies and practices to take advantage of their unique capacities (IUCN-WCC 2005 3.018; and IUCN-WCC 2009 4.053).

Source: Adapted from contributions by the World Alliance of Mobile Indigenous Peoples and Grazia Borrini-Feyerabend.

- 33 The legal and institutional aspects of ICCAs may be complex, involving a mix of customary rights and institutions, along with statutory rights and institutions, and different land tenure arrangements. Some indigenous or traditional peoples may have a form of limited sovereignty which is recognized by the state and includes the right to make their own laws (for example, those peoples recognized as nations). Others may rely on the legal authority delegated to them by the legislature or other high authority in the country.
- 34 A variety of ownership arrangements may exist, separate from the governance structure. In some ICCAs, land may be collectively owned. In other jurisdictions, the lands or waters may be owned by the government and leased or otherwise dedicated to local entities with long-term management rights. In the case of some community conserved areas, the community may not own the land but may claim traditional rights, for example, to harvest products, hunt or otherwise use the land, which may or may not be recognized by the state. Marine areas under the jurisdiction of national or provincial governments may also involve use rights held by local communities, for example, to traditional fishing grounds. The status of such traditional use rights depends on their recognition in the legal system of the country concerned. This recognition may have a constitutional foundation, or be recognized in statutory law or by judicial decision.
- 35 It is normally necessary for communities recognized under this governance type to have a collective identity (recognized in statutory or customary law) and collective rights (recognized communal rights to the voluntarily conserved area). In some jurisdictions, it may be important to distinguish between 'community' members and 'landowners' or 'resource owners'. In the South Pacific, for example, the local community (a village) may include people who are not resource owners. Conversely, there may be resource owners who do not reside in the village. Non-resource owners living in the local community may have use rights but may not be entitled to make management decisions about the ICCA.
- 36 The legal drafter should keep in mind that an area may become a candidate for official recognition as an ICCA in the formal protected areas system through different approaches. One approach is where an ICCA has already been created by the community and is then proposed for recognition. The other is where someone outside the community (for example, a conservation scientist) identifies an area as having high biodiversity value and proposes it be created and recognized as an ICCA to be part of the formal protected areas system.
- 37 **Working definitions.** A few basic definitions are important to consider when assessing whether there may be opportunities for ICCAs to be part of the formal protected areas system. While there is little agreement internationally on terms important for identifying ICCAs, IUCN has developed some working definitions which may be helpful for the legal drafter working with protected area authorities.
- 38 The 2008 IUCN-WCPA guidelines on protected area management categories broadly define this governance type as follows:
- protected areas where the management authority and responsibility rest with indigenous peoples and/or local communities through various forms of customary or legal, formal or informal, institutions and rules (Dudley, 2008, p. 26).
- 39 The guidelines further define the specific subset of ICCAs involving indigenous peoples. Indigenous peoples protected areas are:
- clearly defined geographical spaces, within the lands and waters under traditional occupation and use by a given indigenous people, nation or community, that are voluntarily dedicated and managed, through legal or other effective means including their customary law and institutions, to achieve the long-term conservation of nature with associated ecosystem services, as well as the protection of the inhabiting communities and their culture, livelihoods and cultural creations (Dudley, 2008, p. 30).

It should be noted that this definition was developed to ensure the inclusion of those protected areas in Latin America that are identified as indigenous peoples' conserved territories. The definition of 'indigenous peoples' is left to international law (see discussion in section 4, below).

An important consideration for identifying an ICCA is to understand some of the essential features of a community. The Vth IUCN-WPC summarized the primary characteristics that distinguish community conserved areas in two respects: 40

- predominant or exclusive control and management by communities, and
- commitment to conservation of biodiversity or its achievement through various means (IUCN-WPC 2003 V.26).

IUCN-WCPA guidelines and associated literature elaborate these characteristics by suggesting three essential features that all community conserved areas have in common: 41

- one or more communities closely related to the ecosystems and species at stake because of cultural, livelihood, economic or other ties;
- voluntary management decisions and efforts of such communities lead to the conservation of habitats, species, ecological services and associated cultural values (although the conscious objective of management may not be conservation per se); and
- the communities are major players in decision making and implementing actions related to ecosystem management, implying that some form of community authority exists and is capable of enforcing regulations (Borrini-Feyerabend et al., 2004; Kothari, 2006b). In addition, ICCAs commonly involve areas and resources that are held by the community as common property or as private property subject to community rules.

It is also important to consider who constitutes the 'community' in a community conserved area. IUCN guidelines explain that members of a local community are typically those who are likely to have face-to-face encounters or direct influence on each other's daily lives (Borrini-Feyerabend et al., 2004, p. 9). In that sense, a rural village, a transhumant clan or the inhabitants of an urban neighbourhood can be considered a local community, but not all the inhabitants of a district, city quarter or even rural town would be included. A local community could be permanently settled or mobile. In addition, most such communities have developed their identity and cultural characteristics over time by devising and applying a strategy to cope with a given environment and manage its natural resources. 42

3.2.2 Private governance

The PPA is another special governance type associated with voluntary conservation that has gained significant attention in recent years for its role in biodiversity conservation. As with ICCAs, IUCN-WCPA now recognizes that PPAs may be part of formal protected area systems, as long as they meet the definition and standards for a protected area (Dudley, 2008). As with ICCAs, PPAs have existed in some countries for decades. The US, for example, began to use this form of protected areas governance as early as 1891, shortly after the creation of Yellowstone National Park in 1872, when the first land trust, the Trustees of Reservations, was created by law in Massachusetts (see Trustees of Reservations website). 43

As with ICCAs, PPAs may be recognized as part of the formal protected areas system or may remain outside the formal system but be recognized for their supportive conservation goals, particularly as buffers or connecting corridors. Also, as with all other governance types, the PPA governance type may be applied to terrestrial as well as freshwater, coastal and marine environments. In addition, all IUCN 44

protected area management categories may apply. PPAs may range in size from very small to several million hectares of ecological landscapes or seascapes.

- 45 Particularly since the 1990s, there has been a proliferation of private partnerships and private-public partnerships to promote voluntary conservation on private lands. According to the IUCN-WCPA guidelines on protected area management categories, this has resulted in a “dramatic increase in the number and extent of private protected areas” (Dudley, 2008, p. 32). Growth has been particularly strong in Latin America and the Caribbean, North America, east and southern Africa, Australia, and Europe. For example, in sub-Saharan Africa and South Africa, according to recent estimates, there are several hundred private commercial parks, some more than 100,000 hectares in size. PPAs in southern Africa alone protect millions of hectares as buffer zones for protected areas and connecting corridors for wildlife (Jones et al., 2005, p. 71). According to recent studies, privately owned lands in eastern and southern Africa are playing a particularly important role in conserving critical biodiversity (Langholtz and Krug, 2004, p. 3).
- 46 Similarly, private-sector conservation has also significantly expanded in Latin America, and in recent years government incentives have been put in place to encourage private reserves in order to boost the protected areas system, as in Brazil and Costa Rica (see, for example, Chacon, 2005; Rambaldi, et al., 2005). Chile promotes PPAs in partnership with private landowners and has some of the world’s largest private parks within its protected areas system. This includes the Pumalin Park Nature Sanctuary, covering 300,000 hectares of natural area in the south of Chile, containing fjords, glaciers and pristine forests, which became part of the national system of protected areas in 2005 (see the Pumalin case study accompanying these guidelines: Soto Oyarzún, 2010).
- 47 The challenge for protected area authorities with respect to PPAs was clearly expressed in a 2005 issue of the IUCN-WCPA *Parks* magazine. It is not whether private initiatives exist but rather “how best to integrate them into national protected area systems and global conservation strategies, and act to harness more private initiatives” (Mitchell, 2005, p. 3).
- 48 This challenge is made greater by the fact that data on coverage is limited. PPAs are under-represented in the data reported in the World Database on Protected Areas (Dudley, 2008, p. 31; Mitchell, 2007, p. 89). Recognizing this, the Fourth IUCN-WCC acknowledged the “existence of private protected areas owned and/or managed by private mechanisms in many parts of the world” and noted that “their number and extent are growing fast”, adding that PPAs are not as well understood globally as their contributions warrant (IUCN-WCC 2009 4.072).
- 49 **Distinguishing features.** PPAs have a number of features that distinguish them from ICCAs. Most importantly, such areas are held under freehold title or under lease from the state, and are normally managed by private individuals, NGOs or corporations. ICCAs, in contrast, are managed as common property held collectively by the indigenous group or local community concerned.
- 50 In contrast to ICCAs, where traditional landscape and natural resource management on a sustainable use basis may be the most appropriate conservation objective for linking people to nature, many PPAs provide strict protection or allow very limited use. This is especially the case for those PPAs that are owned or managed by NGOs or individuals motivated primarily by conservation.
- 51 Broadly speaking, there are four approaches to private conservation:
- (a) An individual landowner voluntarily agrees to a formal protected area designation, retaining title and exercising management responsibilities according to the designated conservation objectives and protected area category. In return, the landowner receives assistance or other incentives from the government, including perpetual protection of the site and, as relevant, some revenues

from ecotourism or other compatible uses. Mechanisms for this approach include conservation agreements (discussed in section 5.4, below, and in Part III, Chapter 1, section 8) and management agreements.

- (b) An individual landowner voluntarily surrenders to the government certain legal rights to use the private property in order to preserve certain conservation values, while retaining title and rights to other compatible non-conservation uses (such as maintaining a residence). Sometimes certain rights to a particular property are surrendered in exchange for rights to develop adjacent or other property, or other incentives such as a reduction in property taxes to compensate for the theoretical loss in land value. Mechanisms for this approach include the negative easement (called a conservation easement in some jurisdictions), servitudes, covenants running with the land and management agreements. Such areas may be especially important to incorporate in the protected areas system as buffers and connectivity areas.
- (c) An NGO receives charitable contributions and raises funds privately or publicly to purchase land for protection, or receives a gift of land directly from donors and manages the land for conservation. The NGO may choose to seek recognition by the government, dedicating the land fully to conservation (as in approach 'a', above), or the land may remain outside the formal system and have a more limited dedication (as in 'b', above).
- (d) A for-profit corporation sets aside, donates or directly manages an area for conservation to build good public relations, or as a concession or offset for other activities. Motivations may include interest in gaining 'green' certification for an associated development project or making an investment for the future. The corporation may choose to seek recognition by the government or remain outside the formal system. It may dedicate the land fully to conservation (as in 'a', above) or have a more limited dedication (as in 'b', above).

Working definitions. Similar to ICCAs, there is no definitive international definition of a PPA. A variety of terms may be used, such as private conservancy, private park and private reserve. However, some working definitions have emerged in recent years that may be helpful for the legal drafter working with protected area authorities in assessing opportunities for PPAs to be included as part of the formal protected areas system. 52

IUCN's global guide for managing protected areas refers to a PPA as a "land parcel owned by individuals, communities, corporations, or NGOs and managed for biodiversity conservation with or without formal government recognition" (Borrini-Feyerabend et al., 2006, p. 119). The 2008 IUCN-WCPA guidelines on protected area management categories define private governance as protected areas that are "under individual, cooperative, NGO or corporate control and/or ownership, and managed under not-for-profit or for-profit schemes" (Dudley, 2008, p. 26). 53

The 2008 IUCN-WCPA guidelines elaborate on the institutional arrangements that may exist in the case of PPAs (Dudley, 2008). Typically, decision-making control over PPA management will depend on the private entities involved. Even where arrangements with the government may exist for recognition as part of the formal protected areas system, PPAs normally continue to be under predominant private management rather than under direct government authority (Dudley 2008, pp. 31–32). Common types of institutional arrangements for management control of PPAs include the following: 54

- (a) In the case of an individual landowner, the area is normally under the control of a single person or family.
- (b) Where an NGO is involved, the area is normally under the control of a charitable, not-for-profit or public-interest organization, operating to advance a specific mission and controlled by an executive, a board and subscribing members who may or may not have a say in decision making. In rare cases, this may include cooperatives.

(c) In the case of a for-profit corporation, the area is normally under the control of a private, for-profit company or group of people authorized to act as a single legal entity, and controlled by an executive, an oversight board and ultimately individual shareholders.

55 Specific to Central America, it is worth noting that a Regional Policy on Private Protected Areas was adopted in 2007. Development and adoption of this policy involved individuals, farmers, business people, communities, universities and NGOs from all countries of the region. As part of the process, national networks were created in each country to form the Mesoamerica Network of Private Nature Reserves. The process resulted in a definition for ‘conservation on private lands’, as follows:

The action of conserving ecosystems with importance for conservation of its biodiversity, by the legitimate owners and holders of lands in them. Said lands are the property of individuals, communities, NGOs, and companies. They are mainly located in the buffer zones and areas of influence of publicly owned/managed natural protected areas and connecting different areas in order to generate corridors (CCAD, 2008, p. 13)

Table II-2: Options for nature protection on private lands that support formal protected area systems

General category	Level of commitment / alternatives
A. Self-imposed restrictions on property for conservation purposes, with no legal binding document	1. Management of property in a sustainable way, according to conservation principles
	2. Naming of property with a conservation-associated title ('shelter', 'refuge') and use accordingly
	3. Elaboration and following of business or management plans for the area
B. Self-imposed restrictions on property for conservation purposes, formalized through binding documents, with no participation from a protected areas authority and without being part of the formal protected areas system	1. Conservation agreements, with NGOs, universities or other owners
	2. Conservation easements; land use restrictions are annotated in the public register of property
	3. Other civil contractual mechanisms containing conservation clauses such as documents related to inheritance and wills, loan contracts, or agreements granting the right to use the property
	4. Included in a local or national network, usually involving membership and registered responsibilities
C. Self-imposed restrictions on property for conservation purposes, and voluntarily agreeing to comply with governmental procedures in order to be formalized or recognized as protected areas within the formal protected areas system	1. National protected areas authority creates a register for private owners on a voluntary basis. No major requirements except to be part of a network
	2. National protected areas authority provides legal framework allowing owners on a voluntary basis to obtain recognition of their lands as PPAs. Requirements depend on the country; may include perpetuity, types of allowed uses of property. In most cases, requires formal declaration by the authority for the area to be included in the formal protected areas system
	3. National protected areas authority or other government body provides incentives for properties with formal recognition. May include reduced taxes, payment for environmental services, legal or technical assistance
D. Government-imposed restrictions on land use for conservation purposes, imposed as conditions on ecosystems use or directly affecting individual properties	1. Restrictions on changes in land use, according to type of land (watershed, forest)
	2. Establishing a protected area on private property in the public interest, with or without compensation or consultation
<i>Contributed by Pedro Solano.</i>	

Table II-2 shows the range of commitments private landholders are already making to private conservation in many parts of the world. Of the various PPA options noted, the third (item 'C') is particularly responsive to IUCN's definition for the purpose of inclusion in formal protected area systems. 56

3.3 Co-managed or shared governance

In 2003, the Vth IUCN-WPC called for the increased use of co-management as a tool to achieve conservation objectives, and recognized the importance of enabling legal and policy frameworks for that purpose. It emphasized that co-management was "one of the most effective ways to mobilize [...] conservation-relevant resources" using the "substantial wealth and diversity of conservation-relevant knowledge, skills, resources and institutions at the disposal of indigenous, mobile and local communities, local governments, NGOs, resource users and the private sector" (IUCN-WPC 2003 V. 25). Further, it recommended that governments, protected area agencies, communities, NGOs and the private sector, among others, 57

create or strengthen *enabling legal and policy frameworks* for co-management of protected areas [and called] upon the Conference of the Parties to the Convention on Biological Diversity to address co-management issues in their Programme of Work on Protected Areas, in particularly with regard to *enabling and legal policy frameworks* (IUCN-WPC 2003 V.25, para. (c), (g); emphasis added).

Co-management of protected areas is not a new institutional approach. At its most basic level, it involves collaboration between two or more partners in the management of a protected area. It is one of the oldest means for government entities to cooperate in the management of state-owned or state-controlled protected areas. Today, co-management of protected areas in many jurisdictions continues to be strong with both formal and informal collaboration between protected area authorities, other resource management agencies and entities such as the police and customs for enforcement, universities or other scientific institutions for scientific monitoring and advice, and civic organizations for outreach and education. 58

There is no internationally agreed definition for co-management in the context of protected areas. The Vth IUCN-WPC defines co-managed protected areas as: 59

protected areas (as per IUCN Management Categories I–VI) where management authority, responsibility and accountability are shared among two or more stakeholders, including government bodies and agencies at various levels, indigenous and local communities, non-governmental organizations and private operators, or even among different state governments as in the case of transboundary protected areas (IUCN-WPC 2003 V.25).

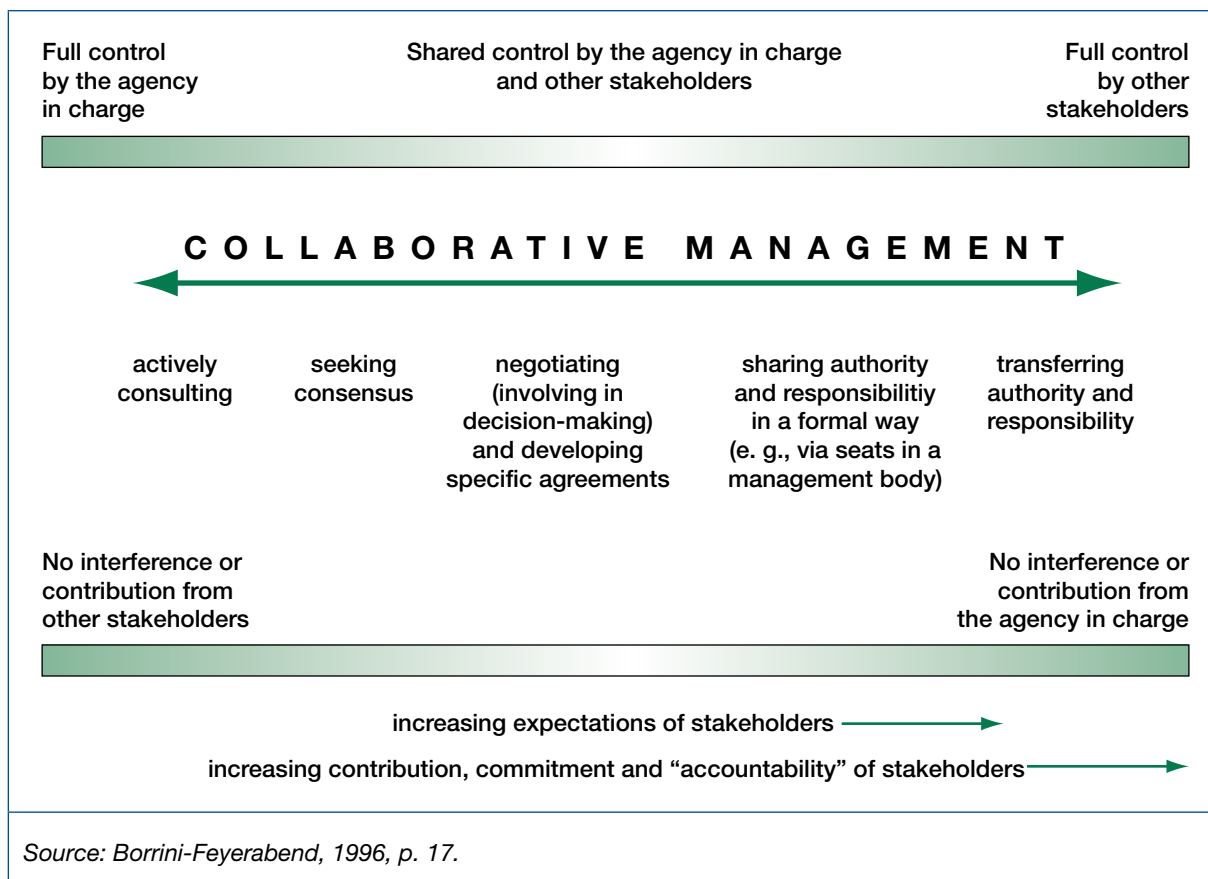
There is extensive literature available on modern co-management arrangements, with case studies and emerging good practice (for example, see Borrini-Feyerabend et al., 2004; Borrini-Feyerabend et al., 2007; Kothari, 2006a).

The concept of co-management as a governance approach may be adapted and expanded to a variety of situations. One of its principal strengths is its flexibility to actively involve multiple stakeholders and decision-making relationships, including government agencies, NGOs, local communities, indigenous peoples, private entities and private landowners. These arrangements normally entail partnership or consultative agreements that lay out the specific responsibilities of the main actors sharing authority. The concept is equally applicable at the central and decentralized levels. 60

In practice, co-management falls within a continuum of possible collaborations for protected areas management between the government and the non-state entity concerned (Borrini-Feyerabend, 1996). As illustrated in Figure II-1, such collaborations range from a purely consultative and advisory role for the non-state entity, to shared responsibility and accountability in a formal arrangement (co-management), to independent control. In some jurisdictions, concessions and other contractual arrangements, for 61

example, for specifically defined functions such as managing tourism in a protected area, are viewed as a form of co-management. Factors that may help distinguish a co-management arrangement from a simple contract for services include whether the arrangement has been sustained for a substantial period of time and whether the roles and distribution of costs and benefits are clear and equitable (Kothari, 2006a). The distinguishing feature, however, is who possesses substantive decision-making powers. Where government authorities have full control (towards the left-hand side of the arrow in Figure II-1), they still have responsibility to consult, share information and seek advice from others, including stakeholders and advisory bodies, as part of good governance—actions that also reflect the start of collaborative management.

Figure II-1: Continuum of possible collaborations



62 A stronger collaborative management arrangement with the non-state entity (towards the right-hand side of the arrow in Figure II-1) could involve clear legal authority and decision-making powers and responsibilities being shared among partners through a formal institutional arrangement such as a commission or board. Such arrangements are normally recorded in a co-management agreement that defines the rights and responsibilities of each party, specifies joint management powers and duties, and indicates how joint decisions will be taken. Rules for decision making are generally spelled out and may range from consensus to a simple majority. There are normally terms in the co-management agreement addressing the time frame for the collaboration as well as such basic issues as breach and dissolution of the agreement (discussed further in Part III, Chapter 1, section 4).

3.4 Governance as a continuum of options

63 The governance of protected areas has seen rapid experimentation in recent decades, as the discussion above suggests. Protected area authorities have been motivated to pursue experimentation in order

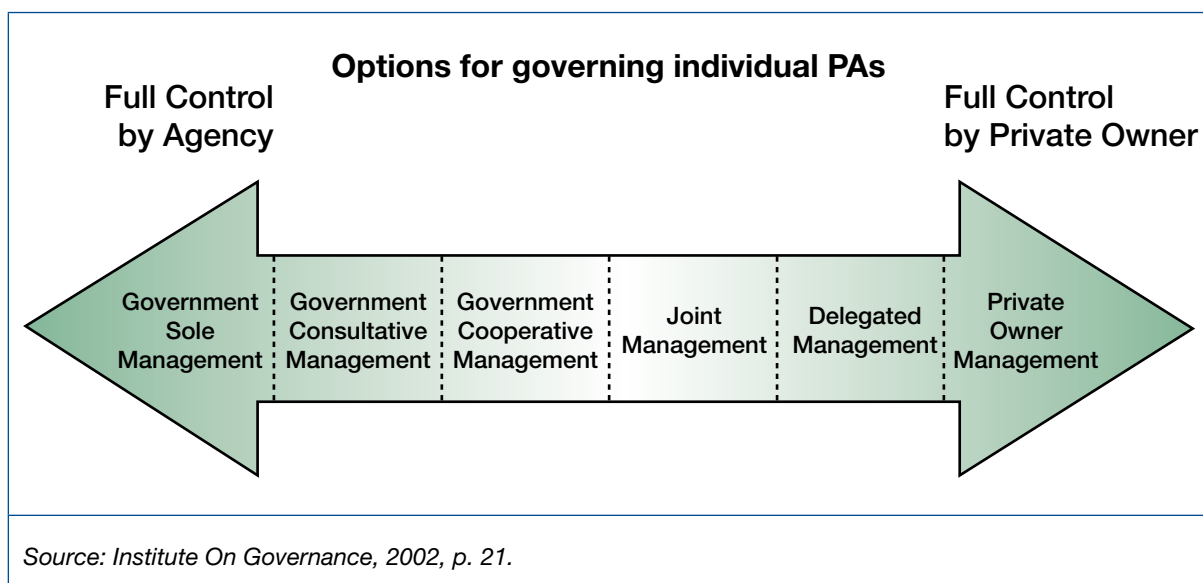
to expand biodiversity conservation and sustainably manage protected sites in the formal protected areas system.

These efforts have opened up an array of new governance options. These options are not static. History, culture, legal issues, incentives and capacity are among the key factors that may determine the appropriate institutional arrangement at a given point in time. Just as scientific management must be adaptive in response to biophysical changes, institutional management must be adaptive in response to changing circumstances. 64

Distinctions between the idealized typologies of protected areas governance blur when these approaches are actually applied to a specific situation. The government will always have some role in giving legal effect and legal standing to voluntarily conserved areas that are recognized as part of the formal protected areas system. This is necessary even if the areas are under the sole management of the group or individuals owning or controlling them. 65

Whether the governance type for a voluntarily conserved area recognized as part of the formal protected areas system is co-management or sole management might be best determined by asking who has the last word in important management decisions. If major decisions must be approved by the government, the governance approach is likely to be co-management. But where the government’s only defined role is to formally declare the area, conduct periodic reviews and monitor implementation of the management plan, the governance approach more closely resembles sole management. It is important to keep in mind that governance arrangements may change from time to time depending on the needs of the protected area and the interests of the partners. For example, collaboration may begin with co-management while the partners gain experience and capacity, and eventually shift by mutual agreement to a more independent decision-making arrangement, depending on the needs of the site and capacities involved. 66

Figure II-2: Options for governing individual protected areas



In 2002, the Canadian Institute On Governance, a non-profit organization founded in 1990 to promote effective governance, issued a report on principles and typologies for protected areas governance. The report characterizes governance as a continuum of options where management controls may shift at different points in time, depending on the circumstances, from sole management by the government to sole management by a private entity. It stresses that there is no correct option to choose along the continuum (Institute On Governance 2002, p. 21) 67

68 The Institute's report includes an illustration of the range of options available for governing individual protected areas (see Figure II-2). These options have much to do with land tenure. For example, the first three options shown in the figure would likely involve public lands, as would the fifth. The fourth could involve a mixture of tenure arrangements, while communities, corporations or private individuals could hold ownership in the sixth.

3.5 Flexibility with new governance approaches

69 As the above discussion illustrates, protected areas governance should be approached with flexibility. The choice of a particular governance or management arrangement at any given point in time will be influenced by many factors including land tenure status; the capacity and interest of the landowner or rightsholder in undertaking sole management, co-management or no management; the capacity and interest of the government to participate actively or in a limited manner; and legal requirements for inclusion in the formal protected areas system. The governance approach selected is normally part of the negotiation process and is reflected in a final agreement between all parties recognizing the voluntarily conserved site as part of the formal protected areas system. For an indigenous or local community, or a private landowner, the main choices for governance or management of their conserved area as part of this negotiation might be characterized as follows:

- undertake all management responsibilities directly and permanently;
- negotiate a contract with the protected areas authority for management or co-management;
- negotiate a contract with a third party (private sector or NGO) for management or co-management;
- a phased approach, beginning with co-management, followed by sole management as capacity is strengthened, for a trial period or permanently;
- a phased approach beginning with sole management for a trial period, with the option to continue that arrangement or, at such time as needs dictate, to change to co-management or no management, where a contract is then concluded with other entities (government or non-government) to undertake management.

70 As the 21st century progresses and governments face increasing resource constraints for acquiring new land for conservation, new protected area governance approaches will increasingly need to be considered in order to help meet biodiversity goals and sustain essential ecosystem functions. Bringing these initiatives forward in an effective and sustainable way will be greatly aided by supportive provisions in protected areas law or other appropriate legislation. These instruments should provide the flexibility to review and revise governance arrangements and management agreements as capacities and needs change with time. The legal regime should also recognize that some entities in charge of voluntarily conserved areas will choose not to be part of the formal system but should still be encouraged in their conservation practices, while other entities will actively seek recognition as part of the formal system for the security and benefits that status brings. The latter case is illustrated by the Regional Natural Park of the Ampezzo Dolomites in Italy, a long-standing ICCA recognized some 20 years ago as a formal protected area, a status actively sought by the communities involved, and today also recognized as a world heritage site (see the Ampezzo case study accompanying these guidelines: Lorenzi and Borrini-Feyerabend, 2010).

4 Supportive international law and policy

71 Several multilateral environmental agreements reviewed in Part I emphasize a broader approach to the governance of protected areas. These include the Convention on Biological Diversity (CBD) (1992),

Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972) and Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971), which are briefly reviewed below. In addition, the United Nations (UN) Declaration on the Rights of Indigenous Peoples (2007) is important for its recognition of the right of indigenous peoples to govern and manage their lands for conservation.

These international instruments serve as an important policy basis for modern protected areas legislation, including elements that provide possibilities for new governance arrangements to be part of the formal protected areas system as long as they meet the necessary requirements.

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4.1 Convention on Biological Diversity

The Ninth Meeting of the Conference of the Parties to the CBD reiterated the need to improve and, where necessary, diversify and strengthen protected areas governance types. It called on Parties to recognize the contribution of “co-managed protected areas, private protected areas and indigenous and local community conserved areas within the national protected area system *through acknowledgement in national legislation or other effective means*” (CBD COP 2008 IX/18, para. 6; emphasis added).

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A number of prior decisions of the CBD Conference of the Parties provide more detailed guidance on governance. In particular, the CBD’s Programme of Work on Protected Areas was one of the first international treaty processes to acknowledge the need to expand governance through legal and other means, suggesting in Programme Element 2 that Parties:

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Recognise and promote a broad set of protected area governance types related to their potential for achieving biodiversity conservation goals in accordance with the Convention, which may include areas conserved by indigenous and local communities and private nature reserves. The promotion of these areas should be by legal and/or policy, financial and community mechanisms (CBD COP 2004 VII/28, para. 2.1.2).

The CBD recognizes the importance of local community and indigenous involvement with in-situ conservation. Article 8(j) provides that each Contracting Party shall:

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Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

4.2 World Heritage Operational Guidelines

The Operational Guidelines for the Implementation of the World Heritage Convention set out detailed considerations and criteria for areas to be designated as world heritage sites (see Part I, section 5). These include encouraging partnerships with local communities, NGOs, private organizations and owners who have an interest and involvement in the conservation and management of a world heritage property (UNESCO, 2008b, para. 40). The Operational Guidelines recognize that human activities, including those of traditional societies and local communities, often occur in natural areas, and that these activities may be consistent with the outstanding universal value of the area where they are ecologically sustainable (UNESCO, 2008b, para. 90).

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4.3 Ramsar Guidelines

Two sets of guidelines adopted by Parties to the Ramsar Convention focus on expanding local involvement in wetlands management. The ‘New Guidelines for management planning for Ramsar

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sites and other wetlands' (Ramsar COP 2002 VIII.14) provide a site-specific framework for wetland management planning. Key elements include:

- (d) Legitimate stakeholders, particularly local communities and indigenous peoples, should be strongly encouraged to take an active role in planning and in the joint management of sites. If necessary, appropriate incentives to ensure full stakeholder participation should be identified and applied (para. 29).
- (e) The involvement and understanding of local communities and indigenous peoples in the management of wetlands is of particular importance where the wetland is under private ownership or in customary tenure, since local communities are themselves the custodians and managers of the site. In such circumstances, it is vital that the management planning process is not seen as one imposed from the outside upon those who depend on the wetland for their livelihoods (para. 32).
- (f) The establishment of a zoning scheme (whether internal zones or buffer zones) and management objectives for each zone is an important part of the process of establishing the close involvement of local communities, indigenous peoples and other stakeholders in the management of a wetland (para. 64–65).

78 Second, the 'Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands' (Ramsar COP 1999 VII.8) recognize that "in many contexts indigenous people and local communities are already involved in managing and using wetlands sustainably, and have long-standing rights, ancestral values, and traditional knowledge and institutions associated with their use of wetlands" (para. 4). In that context, the guidelines encourage active and informed participation, and the assumption of responsibility, by local communities and indigenous peoples in the management of Ramsar-listed sites and other wetlands, and in the implementation of the wise use principles at the local, watershed and national levels (para. 12). Further, they urge Contracting Parties to create, as appropriate, the legal and policy context to facilitate the direct involvement of indigenous peoples and local communities in national and local decision making for the sustainable use of wetlands.

4.4 International Labour Organization Convention 169

79 An international instrument dealing specifically with indigenous and tribal peoples is the International Labour Organization Convention 169 on Indigenous and Tribal Peoples in Independent Countries (ILO 169) (1989), which entered into force in 1991. ILO 169 is significant because it is currently the only international treaty to define indigenous peoples. The definition, as laid out in Article 1, draws a distinction between tribal peoples and indigenous peoples:

This Convention applies to:

(a) tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations;

(b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.

2. Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply.

3. The use of the term *peoples* in this Convention shall not be construed as having any implications as regards the rights which may attach to the term under international law.

The ILO 169 definition provides flexibility and a range of possibilities, relying heavily on self-determination. It is legally binding on the 20 countries that have ratified it. IUCN best practice guidelines on protected areas recognize the ILO 169 position that self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of ILO 169 apply (Borrini-Feyerabend et al., 2004, p. 8). 80

4.5 United Nations Declaration on the Rights of Indigenous Peoples

The UN Declaration on the Rights of Indigenous Peoples (2007), adopted by the UN General Assembly, sets out the basic political rights of indigenous peoples. It represents a commitment of UN member states (143 of whom have signed the Declaration), recognizes many fundamental rights of indigenous peoples, and calls for states to give legal recognition and protection to the lands, territories and resources of indigenous peoples. The Declaration does not define the term ‘indigenous peoples’. 81

Protected areas legislation has an important role to play in supporting implementation of this Declaration. This was the message of the Fourth IUCN-WCC in its endorsement of the UN Declaration in 2008. This endorsement emphasizes the importance of making the role of indigenous peoples in conserving biological and cultural diversity a main concern of IUCN and future sessions of the WCC (IUCN-WCC 2009 4.052). 82

5 Special legal considerations for new governance approaches

A diversity of informal and formal voluntary initiatives exist on private and community lands worldwide. It is unlikely that protected areas legislation has ever explicitly excluded such areas, but as a matter of practice governments have focused on the areas they control or own. Modern protected areas legislation can help advance the expansion and strengthening of protected area systems by recognizing, encouraging and laying out requirements and safeguards for the inclusion of voluntary initiatives in protected area systems. 83

It is important to keep in mind that the field of protected areas governance is still an emerging area. This means that legal elements to support the diversity of possible governance options are only beginning to be defined. Legal tools will continue to evolve as experience is gained with implementation and different approaches are better understood for their benefits and drawbacks. 84

In that context, it is worth highlighting some of the special legal considerations related to management and governance that are important to keep in mind for legislation recognizing voluntary conservation initiatives. 85

5.1 Protected area management categories

All IUCN categories apply. The 2008 IUCN-WCPA guidelines provide that all IUCN protected area management categories may apply to all governance types (Dudley, 2008). It has been a long-standing operational principle that the categories are “universal guidelines applicable without prejudice to size, geography or ownership/governance status” (Mitchell, 2005, p. 4; see also Borrini-Feyerabend et al., 2004, pp. 13–15; and Kothari, 2006a, pp. 551–553). Table II-3 illustrates how IUCN categories might correspond to voluntary conservation initiatives. While these examples were prepared for ICCAs, many of the applications are relevant for PPAs as well. 86

Table II-3: IUCN categories applied to voluntary conservation initiatives

Category	Voluntary conservation purposes and objectives
Category Ia (strict nature reserve) and category Ib (wilderness area)	Sacred, forbidden or otherwise 'no-use' groves, lakes, springs, mountains, islands, etc., with prohibition on uses except on particular occasions, such as an annual ceremony, without extractive activity
Category II (national park)	Watershed forests, private- or community-declared wildlife sanctuaries (at times also for ecotourism use)
Category III (natural monument or feature)	Natural monuments (caves, waterfalls, cliffs, rocks) protected for religious, cultural or other reasons
Category IV (habitat/species management area)	Places where birds breed and nest, other important habitat sites with wildlife populations, sea turtle nesting sites, private or community-managed wildlife corridors and riparian vegetation areas
Category V (protected landscape/seascape)	Large areas where interaction of people and nature over time has produced distinct and significant ecological and cultural value, often with high biodiversity, such as farming lands traditionally used by local communities, long-settled landscapes, mountain communities, lands traditionally used by pastoral communities or mobile peoples (including rangelands, water points, rice terraces, and forest patches), sacred and cultural landscapes and seascapes, collectively managed river basins and landscapes with a mix of natural ecosystems and high agrobiodiversity areas, a mix of land and sea areas such as an archipelago or group of islands
Category VI (managed resource protected area/protected area with sustainable use of natural resources)	Resource reserves (community forests, grasslands, waterways, coastal and marine stretches, including wildlife habitats, private forests, pasture lands, wetlands) under restricted use, with rules and standards that assure sustainable harvesting

Source: Adapted from Kothari, 2006b, p. 5; Phillips, 2002, pp. 10, 15.

87 **Categories V and VI deserve special attention.** IUCN best practice guidelines highlight the relevance of IUCN category V (protected landscape/seascape) and category VI (managed resource protected area/protected area with sustainable use of natural resources) for indigenous and community conservation initiatives because of the unique emphasis of these categories on human–nature interactions and sustainable use (Borrini-Feyerabend et al., 2004, p. 15; Phillips, 2002, p. 10). Category V anticipates the inclusion of human residents and category VI anticipates the inclusion of resource users involved with extraction activities based on sustainable use principles, and prominent among these residents and users would be local communities.

88 The 2008 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) elaborate on the primary objectives and distinguishing features of category V and VI designations (see Box II-3). These objectives and features may be helpful for the legal drafter when developing provisions in principal legislation or subsidiary instruments on protected area management categories. (Generic elements related to protected areas management categories are discussed in Part III, Chapter 1.)

5.2 Good governance principles

89 **Issues of public participation and control.** Two aspects of public participation require special legal attention with respect to new governance types. First, it is recognized internationally that indigenous peoples and local communities are not yet sufficiently engaged in the planning of national protected area systems in which they may be affected, or in the identification and management of protected areas (Durban Action Plan, IUCN-WPC 2004, p. 228). More systematic involvement in decisions and participatory management efforts not only ensure adequate attention to stakeholder interests and

rights but also promote land stewardship and inclusion of voluntary conservation initiatives as part of the national protected areas system.

Box II-3: Category V and VI—distinguishing features for legal consideration

Applying category V: protected landscape/seascape

A site of land or sea may be classified as a category V protected area when it satisfies the primary objective and other essential characteristics.

Definition: A category V site—

- fits the 2008 IUCN-WCPA definition of a protected area; and
- should be an area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic values; and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

Primary objective: To protect and sustain important landscapes and seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.

Essential characteristics: A category V protected area should have—

- landscape or coastal and island seascape of high or distinct scenic quality, “with *significant* associated habitats, flora and fauna and associated cultural features” (emphasis added);
- a balanced interaction between people and nature that has endured over time and still has integrity, or where there is reasonable hope of restoring that integrity;
- unique or traditional land use patterns, for example, as evidenced in sustainable agricultural and forestry systems and human settlements that have evolved in balance with their landscape.

Applying category VI: managed resource protected area/protected area with sustainable use of natural resources

A site of land or sea may be classified as a category VI protected area when it satisfies the definition, primary objective, and has other distinguishing features:

Definition: A category VI site—

- fits the 2008 IUCN-WCPA definition of a protected area; and
- conserves ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. It is generally large, with most of the area in a natural condition, where a portion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.

Primary objective: To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.

Distinguishing features: A category VI protected area—

- has sustainable use of natural resources as a means to achieve nature conservation, together with other actions more common to other categories, such as protection;
- aims to conserve ecosystems and habitats, together with associated cultural values and natural resource management systems, which means that such areas may be relatively large;
- is not designed to accommodate large-scale industrial harvest;
- a portion of the area is recommended to be maintained in a natural condition as a no-take management zone (some countries have set this zone at two-thirds of the area).

Source: Dudley, 2008, pp. 20–22.

Second, indigenous peoples, local communities and private owners with voluntarily conserved areas suitable for inclusion in the formal protected areas system will most likely object to the level of public participation that good governance principles would require of governments in the case of a state-owned or state-controlled property. Non-state entities may expect and require confidentiality regarding the details of negotiated agreements. This is particularly the case for PPA owners with respect to

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private financing and other business matters. Similarly, some indigenous peoples may defend the right to freely determine, within the bounds of the law, what happens to the resources on their lands without outside interference and may find extensive public comment on proposed arrangements unacceptable.

- 91 At the same time, it is important that all relevant laws are applied, including general environmental protection laws, finance laws and environmental and social impact assessment laws. In general, the public should be informed when new governance approaches involving voluntary conservation initiatives are being proposed for inclusion in the formal protected areas system. This could be done at the point when negotiations concerning a draft agreement have advanced sufficiently to have reached a consensus on proposed boundaries, protected area categories and general management objectives. Potentially affected groups, particularly on neighbouring lands, as well as the community at large, may have an interest in commenting.
- 92 Therefore, a balance needs to be found when negotiating for the inclusion of voluntarily conserved areas in the protected areas system. This is necessary to ensure respect for property rights and the confidentiality of details agreed among the parties, as well as to safeguard the public right to know about the transaction. Public information is important as a check on government actions to ensure it is fulfilling its public responsibilities according to the law, including advancing public policy on conservation and public expenditure. For these reasons, it is important for legislation to indicate the basic information that should be available to the public with respect to voluntary transactions (for example, boundaries, protected area category, management objectives and governance arrangements). In addition, it may be useful for the legislation to note that all such arrangements will be subject to applicable laws, including laws for environmental protection and other matters.
- 93 **Emphasize incentives and equitable benefit sharing.** International policy and law emphasize the importance of building equity and local benefit sharing into national laws and policies for protected areas. Experience has shown that designation as a protected area may bring significant economic benefits from tourism and sustainable flows of economically valuable natural resources.
- 94 At the same time, it is frequently the case that the costs and benefits of maintaining protected areas are not shared equitably. Powerful economic interests, for example, in tourism or bioprospecting, may try to minimize benefits to the indigenous peoples, local communities or private landowners who took the decision for inclusion in the national protected areas system. Even where economic benefits flowing from the area are well defined, private or corporate interests may try to control or influence who receives them. Without well-designed legal agreements and effective monitoring and reporting, voluntarily conserved areas that are recognized as part of the formal protected areas system (whether ICCAs or PPAs) may end up bearing most of the costs but receiving few of the benefits, while society as a whole gains the benefits but bears few of the costs.
- 95 Legal provisions and individual agreements also need to include safeguards to prevent the possible abuse of tax benefits or other economic incentives by landowners or rightsholders who default on long-term conservation commitments. Where there is a breach of these commitments, legal provisions and individual agreements must be clear that financial benefits received from or investments made by the government in exchange for the long-term commitment must be repaid by the landowner or rightsholder if the breach cannot be remedied.

5.3 Tenure and governance

Tenure is a separate consideration from governance but important when considering the appropriate governance approaches for a particular site. While governance involves authority for decision making with respect to a protected area, tenure relates to who holds land ownership rights or use rights to resources on the site, along with the benefits and responsibilities that come with the exercise of those rights (IUCN, 2008). Land ownership or resource use rights may be established through written law (for example, constitutions, statutes, regulations) or judicial decisions, or through customary law where certain rights of use and practice are widely accepted by the communities involved even though they are not set out in written law. Where tenure rights are not recognized through one of these mechanisms, legal uncertainty may arise and legal challenges to the validity of such rights may result in the loss of the claimed ownership or use rights. 96

Tenure systems may vary greatly in different countries and regions, and conservation areas may comprise a variety of tenure rights. In some communities, tenure systems may cover a mix of collectively held property and freehold land (held by individuals, NGOs or for-profit corporations), as is the case in some South Pacific island states. In regions of the world where colonial or post-colonial policies resulted in governments taking over community lands held collectively, community conservation initiatives today may actually be on government lands that are managed by the communities as collective property or property held in common (see the India case study accompanying these guidelines: Pathak and Kothari, 2010). 97

In some governance types (for example, the classic state-owned or state-controlled protected area, or a PPA), governance and ownership control are the same. In co-managed and indigenous or local community governance, however, a variety of combinations are possible. Indigenous or local communities may hold land, sea or resource ownership or use rights recognized in statutory or customary law as common property or private property governed by community rules. Yet they may choose co-management (or shared governance). This may also be the case with private landowners who may choose to negotiate a leaseback to the government for management by the government. Conversely, the government may hold rights to certain land or sea areas, or the resources within them, but may delegate management to a community, corporation or NGO. 98

In some communities, property may be held collectively or in common, with well-established formal or informal recognition of rights to the land, waters and natural resources. This may include communities that reside on government land but have authority to pursue independent management. Such is the case, for example, with Australia's National Reserve System, which has three principal components, all of which receive recognition and funding support: the formal public reserves system; a voluntary 'contractual' system of indigenous protected areas; and approved private trusts, groups of individuals or individuals who develop PPAs (Figgis et al., 2005, p. 20). In addition, different kinds of ownership may exist side by side with government land in a core area, adjacent to other property governed by indigenous peoples or local communities under customary law, or held by private landowners. 99

Some communities, especially in Latin America, may be incorporated, holding land collectively and legally secured, and considering their rights to be 'private' property rights. As a body corporate, they may still hold certain land or resources in common, with rights emanating from constitutional or other land law authority. For example, Guyana recognizes the collective identity of Amerindian communities. These communities hold their lands under an absolute collective title and control what happens to the resources on their lands including mining and forestry. The governing body for each community is an Amerindian village council which has law-making power. Other countries may have similar arrangements. 100

101 Australia, with various governance arrangements for indigenous protected areas as part of the national system, illustrates the diversity of governance and ownership possibilities. As shown in Table II-4, some Aboriginal peoples have ownership rights and choose to remain in control of management, or to share management with the government through a management board (a co-management arrangement). Others have opted to lease back their land to the government for a specified period or in perpetuity. In some cases (the Witjira model), the state owns the property but by constitutional or other legal authority, or by practice, indigenous peoples or local communities govern use of the property or resource, effectively in perpetuity. This table shows a variety of protected area governance arrangements negotiated between the Australian government and indigenous communities depending on land tenure and other interests in each case. (For an extended discussion of the range of protected area co-management governance types currently existing in different jurisdictions in Australia, see Part II of the Booderee case study accompanying these guidelines: Farrier and Adams, 2010.)

Table II-4: Selected co-management and sole management arrangements in Australia

Garig model	Uluru model	Queensland model	Witjira model	Dhimurru model
Aboriginal ownership	Aboriginal ownership	Aboriginal ownership	Government ownership	Aboriginal ownership
Equal representation of traditional owners and government representatives on management board	Aboriginal majority on management board	No guarantee of Aboriginal majority on management board	Aboriginal majority on management board. Aboriginal people are the primary managers	Aboriginal control of governance. External input is advisory only
No leaseback to government agency	Leaseback to government agency for long period	Leaseback to government agency in perpetuity	Lease of the national park to traditional owners	No leaseback
Annual fee to traditional owners (for use of land as a national park)	Annual fee to traditional owners, community council or board	No annual fee paid	—	Variable funding by government; other resources accessed by Aboriginal owners
Example: Garig Gunak Barlu National Park	Examples: Uluru-Kata Tjuta, Kakadu, Nitmiluk, Booderee and Mutawintji National Parks	Examples: KULLA (McIlwraith Range) National Park	Example: Witjira National Park	Example: Dhimurru Indigenous Protected Area

Source: Borrini-Feyerabend et al., 2007; with further information provided by Michael Adams.

5.4 Agreements with the government

102 Contemporary protected areas legislation that is intended to include new governance approaches within the protected areas system should provide for two types of legal agreements between the government and the parties concerned. One is a legal agreement, sometimes called a conservation agreement, stating the primary conservation objectives for which the site is to be designated as part of the formal protected areas system, the protected area category assigned to guide management, and other basic commitments made by the parties with respect to the area that are expected to persist over time, even as governments and landowners or rightsholders change. The other, also a legal agreement, lays out the co-management or management arrangements. As agreed by the partners, this document

describes such elements as the institutional arrangements, parties involved, and distribution of main rights and responsibilities with respect to managing the site.

The first type of agreement, laying out long-term conservation commitments, may be and usually is perpetual and attaches to the land. The co-management agreement, in contrast, may be time-bound and subject to change or renewal, similar to a normal contract. Legal considerations associated with these agreements are briefly described below. 103

A conservation agreement (in some jurisdictions called a ‘voluntary conservation agreement’ or simply an ‘agreement’) is the essential pre-requisite for designation of a voluntarily conserved area to be recognized as part of the formal protected areas system. This agreement contains substantive provisions identifying the important features or area to be protected, the primary conservation objectives, and the corresponding protected area management category that will apply to the site. The agreement reflects the substantive conservation commitments made by all parties on the nature of the long-term protections that will apply to the area. 104

This agreement is recorded in the official land registry as part of the deed or property identification. If the land is sold or otherwise transferred to another party, or if management or governance arrangements need to change for any reason, the conservation agreement remains in place and in effect in order for the site to continue as designated in the formal protected areas system. Incentives that are conditional on this permanent arrangement (for example, reduced taxes, revenue benefits, security of tenure) are clearly identified in the agreement and remain in place should the parties to the agreement change. 105

This tool gives legal effect to the requirement of perpetuity and other criteria that allow a site to fit the definition of a formal protected area. It also secures incentives that may need to be in place permanently. (Part III, Chapter 1, section 8, discusses provisions for conservation agreements and suggests elements that may be appropriate to include in such agreements.) 106

A co-management (or management) agreement is a contract describing the management or governance arrangements to be applied to a protected area, including any co-management arrangements that may have been negotiated. These agreements should clearly lay out the specific rights, responsibilities, incentives and disincentives associated with the management arrangement. In some cases, where management arrangements are particularly detailed, the provisions may be elaborated in a side agreement to the management agreement. Side agreements may also contain the management plan, various related action plans, monitoring plans and compliance measures. A co-management agreement may specify the period of application for the distribution of management powers, after which it would be reviewed and revised as needed, or the agreement may simply indicate its application indefinitely into the future until revisions are mutually agreed. The management agreement may be attached to the main conservation agreement and cross-referenced as an integral part of the main conservation agreement for purposes of judicial review. As a matter of legal convenience, it is desirable to have the management arrangements, which may need to be adjusted with time, in a separate document from the substantive conservation commitments which are in perpetuity and normally would not change. (For a detailed discussion of legal considerations associated with co-management arrangements see Part III, Chapter 1, section 4.3.) 107

6 Other legal tools supporting voluntary conservation

6.1 Easements and covenants attached to the land

- 108 The easement is a legally binding instrument that attaches to the land. It is normally recorded with the deed, or otherwise legally registered as related to that piece of land. An easement may be on a time-bound or perpetual basis. Whichever time frame is involved, the title remains with the private owner. Where an easement provides for actions by the party that relate to the land in perpetuity, legally speaking it also qualifies as a 'covenant running with the land'. Such a covenant, because it relates to the land, binds successor grantees indefinitely. The land cannot be conveyed without the covenant.
- 109 Easements are increasingly being used in some jurisdictions for conservation purposes and are sometimes called 'conservation easements'. As with other conservation actions covered in this Part, the conservation easement is normally a voluntary agreement that commits the landowner or rightsholder to certain obligations with respect to the land or resource. It may be framed to limit the type or amount of development on the property (normally protecting the land from unwanted development) which, legally, would be a negative easement. Or it may be framed to oblige the party to carry out specific actions on the land or to use the land in a certain way related to active management and conservation, and this type of easement, legally, is known as an affirmative easement. Whichever approach is chosen, for a conservation easement to be considered sufficient to recognize a protected area as part of the formal system, it must favour the preservation of certain conservation values in perpetuity.
- 110 The approach of using a conservation easement or covenant running with the land is attractive for the government (or a conservation organization that may purchase the easement) because it secures a partial legal interest in the land for conservation without requiring that the government or conservation organization purchase the land. It is of interest to private landowners because they retain title and ownership, allowing continued use in perpetuity as long as it is consistent with the terms of the covenant or easement.
- 111 An conservation easement is normally a formal legal agreement, containing detailed provisions on the rights and obligations of all parties involved, the conservation values to be protected, baseline documentation, prohibited and permitted actions on the land, and remedies for violation of the agreement. Such an agreement states that successors will be bound to all provisions to the same extent as the person who initially concluded the agreement. It may be appropriate for the legislation to recognize the use of conservation easements (or similar term appropriate for the jurisdiction) as an additional tool for voluntary conservation initiatives.
- 112 A easement is signed by the landowner who gives the easement and by a legally recognized entity (a government agency, conservation NGO or land trust) who receives the easement and has competence to enforce it. For the purposes of recognizing the area as a formal protected area, the recipient entity accepts the easement with the understanding that it must enforce the terms of the easement in perpetuity. After the easement is signed, it is recorded with the appropriate official land registry responsible for land deeds, and all future owners are bound by the easement. As such, it works essentially as 'a covenant running with the land', a standard property restrictive instrument in many jurisdictions.
- 113 In the US, the UK and some countries in Latin America, tax incentives are provided for concluding such easements as long as the easement is perpetual and meets certain conditions. To receive these tax incentives, typically in the form of tax deductions, the property must normally be determined to have significant conservation value. In the US, however, easements qualify as long as they are perpetual and

donated to a non-profit or governmental organization (in other words, no special finding of conservation value is involved).

There is an extensive and growing body of literature on the use of easements or covenants for conservation, as applied in different parts of the world. A 2005 issue of the IUCN-WCPA *Parks* magazine included an overview of land trust and conservation easement activity in the US, where the experience is particularly extensive (see Bernstein and Mitchell, 2005). Similarly, a report on Latin America and private conservation initiatives presented at the Vth IUCN-WPC contained analysis on the use and potential for conservation easements in South and Central America (ELI, 2003). 114

In the years ahead, this legal tool for private conservation appears to have potential to outpace other functions of land trusts (such as outright land purchase) in countries where easements are emerging as a conservation option. It is likely to bring more visibility to the land trust as a strong player in private conservation. 115

At the same time, it should be noted that in some jurisdictions use of the conservation easement in a voluntary conservation initiative may not be an effective means to ensure perpetual conservation. In Denmark, for example, legislation does not recognize conservation easements undertaken on a voluntary basis as legally binding on the state. Instead, it uses conservation regulations which, legally speaking, take the form of easements to impose certain conservation practices on private lands in order to support existing protected areas or add new ones. While the owner is compensated for decreased economic use of the affected area, application of the easement and its terms are not voluntary. However, the owner continues to hold title which is normally preferred (see Part III, Chapter 1, section 6.7). 116

6.2 Land trusts

Since the 1970s, NGOs in many regions of the world have taken an increasingly active role in private land conservation, both in property acquisition and in property management for other owners. Commonly, such NGOs have been formed as specialized private, non-profit, charitable associations, called 'land trusts'. Worldwide, land trusts are beginning to generate an impressive growth in private conservation. 117

In general, conservation land trusts function in three main ways. First, like their public counterparts, they own, retain and manage land in freehold, acquired by donation or purchase (usually with donated funds). Second, they actively seek and negotiate transfer of title of these lands to government protected area agencies at much reduced prices, to be part of the formal protected areas system, whenever the lands are of high conservation value and governments have resources for management. In some cases, such lands are conveyed to governments with agreement for shared management based on specific public-private partnership arrangements or extended transition periods of co-management. 118

Third, land trusts are becoming increasingly active with land easements for conservation and have taken on additional responsibilities to monitor compliance of commitments made by private landowners and certify landowners' continued eligibility to receive benefits contingent on that commitment. Land trusts promote easements or covenants for conservation as another approach to voluntary conservation, and activity in this area has brought the land trust into increasing visibility. A land trust may accept an easement based on its own criteria, depending on the conservation values involved and the resources that will be needed to monitor implementation. In some cases, a condition of accepting the easement is a financial contribution from the owner to help with enforcement and monitoring costs. 119

Commonwealth countries such as the UK and Australia have a long tradition of private land conservation through land trusts and private owner actions. In the UK, the National Trust and the Royal Society 120

for the Protection of Birds play dominant roles in extensive networks of voluntary conservation sites. Australia has also been very active in private land conservation and the use of land trusts, especially since the mid-1990s when it adopted its current National Strategy for the Conservation of Biological Diversity to promote and establish voluntary management schemes for the conservation of private lands (Figgis, 2004, pp. 6, 11).

121 In the US, land trusts and related private conservation initiatives developed in parallel with public efforts to build a national protected areas system. An extensive network of private, non-governmental protected areas has developed since the 1970s through initiatives of land trusts and private owners, which in some eastern states approaches 10 per cent of the total land area (Bernstein and Mitchell, 2005, p. 48). NGOs organized as conservation land trusts have long played a lead role in the US and many other industrialized countries, and are beginning to initiate partnerships in developing countries as well. Such land trusts purchase land or resource rights which are then dedicated to conservation, normally through legal covenants or other agreements associated with the transaction.

Box II-4: Land Trust Alliance—standards for the operation of a land trust

To be a member of the Land Trust Alliance, individual land trusts are required to adopt the following standards which have been developed as guidelines for the responsible operation of a land trust:

Standard 1: Mission

The land trust has a clear mission that serves a public interest, and all programs support that mission.

Standard 2: Compliance with Laws

The land trust fulfills its legal requirements as a nonprofit tax-exempt organization and complies with all laws.

Standard 3: Board Accountability

The land trust board acts ethically in conducting the affairs of the organization and carries out the board's legal and financial responsibilities as required by law.

Standard 4: Conflicts of Interest

The land trust has policies and procedures to avoid or manage real or perceived conflicts of interest.

Standard 5: Fundraising

The land trust conducts fundraising activities in an ethical and responsible manner.

Standard 6: Financial and Asset Management

The land trust manages its finances and assets in a responsible and accountable way.

Standard 7: Volunteers, Staff and Consultants

The land trust has volunteers, staff and/or consultants with appropriate skills and in sufficient numbers to carry out its programs.

Standard 8: Evaluating and Selecting Conservation Projects

The land trust carefully evaluates and selects its conservation projects.

Standard 9: Ensuring Sound Transactions

The land trust works diligently to see that every land and easement transaction is legally, ethically and technically sound.

Standard 10: Tax Benefits

The land trust works diligently to see that every charitable gift of land or easements meets federal and state tax law requirements.

Standard 11: Conservation Easement Stewardship

The land trust has a program of responsible stewardship for its easements.

Standard 12: Fee Land Stewardship

The land trust has a program of responsible stewardship for the land it holds in fee for conservation purposes.

Source: LTA, 2004.

A favourable public law and policy environment adopted in the 1970s in the US has helped land trusts experience exponential growth. These policies and legislation provide tax incentives for land donation to charitable organizations. Many states in the US have since passed legislation, or amended their state constitutions, to provide property tax reductions when conservation easements are concluded on the land. 122

In 1982, the Land Trust Alliance (LTA) was created as an association of land trusts across the US promoting voluntary conservation of private lands. From fewer than 450 land trusts in the 1980s, the LTA has grown to more than 1,600 land trust members (see LTA, 2010). These land trusts are private, non-profit organizations that operate through conservation professionals, volunteers and supporters to conserve wildlife habitat, farms, ranches, forests, watersheds, recreational areas and other important natural resources. A national land trust census undertaken by the LTA in 2005 found that the total acres conserved by local, state and national land trusts doubled between 2000 and 2005, to reach 37 million acres, an area 16½ times the size of the first official park in the US, Yellowstone National Park (Alldrich and Wyerman, 2006). This has resulted in an extensive network of private, non-governmental protected areas. 123

The LTA pioneered the use of conservation easements to preserve private lands in the US. Its goals include defending the permanence of conservation easements and expanding private land conservation through the use of tax incentives. In the 1990s, the LTA developed Land Trust Standards and Practices for individual land trusts to adopt as a condition of membership. These standards, the latest version revised in 2004, are ethical and technical guidelines for the responsible operation of a land trust in the US. They are organized into 12 standards, with supporting practices to advance the standards. Designed primarily for non-profit, tax-exempt land trusts, they also provide important guidance for any government, community, individual or organization that holds land for the benefit of the public. See Box II-4 for a summary of the standards. 124

Illustrating the impact and potential of this new area of NGO activity for conservation is The Nature Conservancy (TNC), one of the largest land trusts in the world. Since its founding in the US in 1951, it has protected more than 117 million acres of land and 5,000 miles of rivers worldwide, and operates more than 100 marine conservation projects globally (see TNC website). An NGO with more than 1 million members, TNC now works in all 50 states of the US and in more than 30 countries, from Australia to Costa Rica to Zambia. Its efforts also address threats to conservation involving climate change, fire, fresh water, forests, invasive species and marine ecosystems. Among its partners are governments, other land trusts, communities, individuals and other non-profit organizations. 125

Part III, Chapter 1: Generic elements of protected areas legislation

This Part lays out generic elements important for protected areas legislation. It incorporates the principles, concepts, international obligations and guidance reviewed in Parts I and II. It is divided into two chapters, the first on generic elements for protected areas legislation whether on land or sea, and the second on additional legal considerations specific to marine protected areas (MPAs).

Introduction

The elements presented here are offered as guidelines and not as prescriptive elements or a model act. Socio-economic circumstances and substantive priorities with respect to protected areas and biodiversity conservation will vary from country to country, and from jurisdiction to jurisdiction. 1

In addition, each jurisdiction has its own legal traditions and practices, hierarchy of legal instruments, and rules for their use. For example, some countries have general enabling legislation in a principal law or act of parliament or the legislature for the national system of protected areas and this principal law authorizes specific sites to be designated by schedules or subsequent instruments in a form provided by the law. Other jurisdictions choose to enact self-contained legislation for individual sites. Still others use a combined approach, providing for national protected areas legislation overall, designating specific sites at the time of enactment or subsequently, with separate legal instruments for some protected areas with special features. 2

It should be stressed that not all elements presented here may apply or be relevant in every country or jurisdiction. The intention of these protected areas legislation guidelines is to provide the legal drafter and protected area authorities with the full array of legal considerations. Subject to local needs and legal practice, legal drafters working with protected area authorities are best equipped to examine, select, adapt and apply those elements that are responsive to and feasible for their legislative needs. 3

This Part begins with a discussion of pre-drafting preparations that the legal drafter should undertake. It then turns to the generic elements important for protected areas legislation, arranged under 13 main subject headings. The organization of this Part parallels the main subjects normally covered by protected areas legislation. It should be noted that the order in which topics are addressed in the legal instrument of a particular jurisdiction will be according to local legal practice. For example, in many jurisdictions, definitions or institutional arrangements may be placed at the end rather than the beginning. 4

1 Pre-drafting preparations

The elements discussed in this section reflect good practice concerning the manner in which the legal drafter should approach and carry out the drafting process. Good preparations provide the necessary background and analytical information to design an effective legal instrument or set of instruments. 5

Different jurisdictions function in different ways with respect to pre-drafting preparations. In some instances, as an aid to the legal drafter, the protected areas authority may have prepared in advance a 6

list of legal priorities, or it may have collected legislative examples from other countries or jurisdictions highlighting concepts of interest. In other cases, the legal drafter may have draft provisions or an entire act submitted by conservation non-governmental organizations (NGOs) or other concerned groups. In most cases, however, once assigned the task of reviewing existing or drafting new protected areas legislation, the legal drafter will be initiating the research without such inputs. Good practice requires that pre-drafting preparations should include a review and analysis of the relevant law and policy in place in the country, as well as a comparative review of instruments in other countries to the extent that this may be helpful. In addition, good practice requires ongoing consultations throughout the drafting process with protected area authorities responsible for implementing the legislation.

- 7 Substantive legal review and analysis as part of pre-drafting preparations will include, as relevant, the constitutional context, international treaty obligations, existing national policy, legal and institutional frameworks already in place for protected areas, other laws with concurrent or overlapping scope, and relevant judicial decisions. This exercise requires carrying out an inventory of all instruments that may have an impact on protected areas.
- 8 **Constitutional provisions.** Constitutional provisions normally contain the foundational principles on which policy is grounded. In addition, many constitutions contain provisions related to the fundamental rights and responsibilities of the state and its citizens, which are enforceable through the judicial process.
- 9 Most modern constitutions also contain provisions related to the conservation of the natural environment, along with references to environmental protection and sustainable development (see Box (III)(1)-1). Other principles that are increasingly recognized in modern constitutions include environmental justice, prior informed consent, public participation and the precautionary principle, all of which are important for protected areas legislation, as discussed in Part I.
- 10 Provisions with implications for protected areas may also relate to land use, tenure and other property rights, including recognition of traditional rights or customary law. These provisions are particularly relevant where new protected area governance arrangements involving indigenous or traditional peoples and voluntary conservation initiatives are being considered for inclusion in the legislation, as discussed in Part II.
- 11 **International treaty obligations.** An essential part of pre-drafting preparations is a review and analysis of multilateral treaties (global, regional) and bilateral agreements to which the country is a Party, which may contain national obligations related to or affecting protected areas. The review and analysis should include decisions of the Conferences of the Parties, which elaborate treaty obligations relevant to protected areas through guidelines, resolutions and recommendations. Government legal departments, offices of attorneys general or ministries of foreign affairs normally maintain current lists of multilateral treaties in force in the country or being considered for ratification, as well as other legally binding agreements that may be relevant.
- 12 In some legal systems, international treaty obligations automatically become national law by the fact of ratification. In others, they must be translated into implementing provisions in national legislation in order to become effective. These two approaches reflect differing legal relationships between international law and national law, and are referred to in the legal field as the monist approach and the dualist approach, respectively.
- 13 Each state decides for itself, according to its legal traditions, which approach to apply. In monist states (such as China, and some countries in Latin America and Eastern Europe), international treaty obligations do not need to be translated into national law for the obligations to take effect. Judges

may apply the treaty obligations directly to determine whether certain actions are legal or illegal. However, even in monist systems, enacting more specific legislative provisions in national law is usually required to elaborate treaty obligations, indicate how they will be implemented domestically to advance best management and good governance principles, and specify who will be accountable for implementation.

In dualist states, such as the UK, the US and many European countries, international treaty obligations need to be addressed in national legislation for them to have effect in national law. Thus, if not already available, implementing provisions in national legislation must be enacted in order for treaty obligations to be binding on citizens and agencies. Judges cannot apply them directly although, following the spirit of the law, the courts may take treaty obligations into account as additional information to inform a case. 14

The supremacy of international treaty law is a rule in both monist and dualist systems. Existing national law that conflicts with international treaty obligations must be modified or eliminated in order to conform with the international obligations newly accepted by the state. 15

Under either system, the legal drafter needs to assess whether existing legislation contains the necessary provisions to effectively implement existing and anticipated treaty obligations. If not, existing legislation should be revised or new legislation enacted to incorporate such provisions. The legal drafter should also identify other national legislation that may have been enacted to implement the obligations of specific treaties such as the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971), Convention on the Conservation of Migratory Species of Wild Animals (CMS) (1979), and Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972). Some jurisdictions include an annex or schedule to principal protected area legislation, listing the relevant international environmental treaties and associated instruments and, in some cases, citing key sections containing specific obligations related to protected areas. 16

National policies and laws in place for protected areas. Goals and objectives identified in protected areas legislation should build upon national policy on nature and biodiversity conservation. National policy on protected areas may be delineated in a distinct policy statement or, more commonly, in national biodiversity strategies, action plans and reports the country submits to international conventions to which it is a Party or programmes of which it is a member. Other sources of national policy relevant for protected areas may be found in national development strategies, speeches of high-level officials and proclamations of the legislature. 17

A review and analysis of the existing national legal framework for protected areas is also essential in order to understand specific legal mandates that may already exist and to identify gaps. The review is important to assess the implementation of existing provisions, whether they are being implemented at all or in part, and whether they may be outdated or no longer in use, and the reasons involved. The analysis will provide important information on the strengths and weaknesses of the current legal framework and its effectiveness on the ground. The review should include all instruments with legal effect, including executive directives or orders and court decisions. 18

It is highly likely that a number of resource-specific laws will exist, most of which will assign conservation responsibilities including, in some cases, distinct powers to create special reserves, for example, for the conservation of wildlife or the management of forests, fisheries, marine or freshwater areas, watersheds, coastal zones and soil resources. There may also be separate legislation on biodiversity conservation. Other environmental legislation may have relevance as part of the broader legal framework within which 19

protected areas legislation operates, including general environmental protection and pollution control laws, and environmental and social impact assessment requirements.

- 20 **Other national policies and laws.** The review and analysis of national legislation should not be limited to legislation directly concerning protected areas or resource-specific laws. Other laws may have a significant impact on the effectiveness of protected areas legislation, in some cases reinforcing conservation objectives and in other cases establishing concurrent, overlapping or conflicting mandates. They may also have an impact on governance arrangements being considered for inclusion or recognition in the protected areas legislation. Such laws include national legislation governing land ownership and use, traditional rights and customary law, industrial or agricultural development, mining, tourism, and taxation.
- 21 **Existing institutional framework.** An institutional review and analysis should also be conducted, taking into account the current legal mandates, functions and capacities of existing institutions with protected area responsibilities in different government sectors and at various jurisdictional levels. In addition to government agencies, local communities, indigenous and traditional peoples, NGOs and the private sector may have protected area responsibilities. The review should look for areas of concurrent jurisdiction, where functions and capacities are complementary, as well as major institutional conflicts.
- 22 **Consultations.** As emphasized throughout these guidelines, the legal drafter should maintain ongoing consultations with the protected area authorities who will have responsibility for implementing the protected areas legislation. Consultations with other interested or affected agencies and stakeholders are also important throughout the process. Other agencies may have overlapping or complementary mandates that need to be harmonized. Stakeholders need meaningful information in order to provide input about their interests, rights and concerns. Ideally, the legal drafter should:
- (a) Participate in pre-drafting consultations at the protected area administrative and managerial levels to become informed about key goals and issues to be addressed by the legislation, and to provide input on existing legal constraints and opportunities.
 - (b) Undertake pre-drafting consultations with government agencies and other entities in relevant sectors to inform them about the project and gather information on those aspects of their legal mandates that may relate to protected areas legal reform, areas for harmonization, constraints, conflicts, and opportunities for formal and informal collaboration.
 - (c) Consult with protected areas technical experts as well as technical specialists in other related sectors (land use planning, wildlife and forest management, fisheries and marine protection, tourism, mining) to understand implementation issues in their respective areas of responsibility.
 - (d) Participate in public meetings organized by the protected areas authority with key stakeholders, including local communities, indigenous peoples and private landowners, as appropriate, to inform stakeholders and the public about the initiative and to receive feedback on local issues, concerns and priorities, areas of support or opposition, and potential partnerships that may be factored into the design of processes and tools provided in the legislation to facilitate implementation and local compliance.
 - (e) Take part in technical consultations throughout the drafting process in order to be updated on current and emerging issues relevant for the legislation, receive feedback on proposed elements and early drafts, understand strengths and limitations in each jurisdiction for implementing particular provisions, and keep in mind any new institutional partnerships that may facilitate implementation and compliance.
- 23 **Legislative options.** Decisions to strengthen the protected areas legal framework may involve certain structural choices, such as the following:

- **Amend an existing law or enact a new law.** In many cases, the principal legislation may be significantly outdated and a new principal act may be needed. In some cases, recent legislation may be deficient in such matters as MPAs, new governance types or climate change. For example, Ontario, Canada's largest and most populous province with roughly 9 per cent of its land in protected areas, substantially updated its legal framework in 2006 with a new Provincial Parks and Conservation Reserves Act, adding an ecological integrity standard, increasing opportunities for aboriginal or First Nations communities to participate, and assessing the system against common standards, including IUCN protected area management categories. There are also new commitments to increase protected areas through community-based planning and to protect northern boreal forests for their important role in storing carbon to mitigate climate change (see the Ontario case study accompanying these guidelines: Benidickson, 2010b).
- **Prepare a stand-alone law, or a title or chapter in omnibus environmental legislation.** Where new legislation is called for, depending on the legal approach, it may be a separate law or a component of an omnibus environmental law or code. Most countries have stand-alone legislation for protected areas.

2 Preliminary sections of the legislation

2.1 Definitions and interpretation

Commonly, protected areas legislation contains a distinct provision or set of provisions on the definition or interpretation of terms. Some jurisdictions may use the term 'dictionary'. Such a section defines core terms that are central to the application of the legislation because of their scientific, technical or other special meaning. 24

2.1.1 General rules

The normal drafting rule should apply, whereby the definition of a term in an interpretative section should not contain substantive matter which would normally be more appropriate for the body of the legislation. Another good practice rule is that a technical definition should be based on sound science. 25

There are associated rules on what to include and how to formulate terms that may apply, subject to the legal practice in a particular jurisdiction. First, it is important not to over-define terms, or the legislation may become difficult to apply. For example, as far as possible, terms should be defined in such a way that the definition does not use terms that, in turn, require their own definitions. Second, for many terms, the ordinary dictionary meaning will suffice, in which case the term does not need to be defined at all. The focus should be on terms that are necessary to define because of their special meaning in the text. Third, in some cases new or revised legislation will replace an old definition and, to the extent possible, the new definition should be universally applied. There may be special circumstances where both definitions will need to be recognized for an interim period but the goal should be to phase out the old definition as quickly as possible. 26

Where the definition of a term is placed is an important consideration. Some terms should be defined in the definitions section, especially when there is a clear, concise definition that does not derive its meaning from substantive provisions in the law. For protected areas legislation, international law and policy guidance may provide useful definitions which can be incorporated directly or with some adaptation to fit the situation. This is an important consideration especially where the country is a Party to a multilateral treaty which defines specific terms. Examples from international law and policy include such terms as 'wetlands' (in the Ramsar Convention), 'migratory species' (from the CMS), 'world 27

heritage' (under the World Heritage Convention) and 'protected areas' (pursuant to IUCN guidelines). Some of the common internationally defined terms relevant for domestic protected areas legislation are noted below.

- 28 Other important terms derive their meaning from a substantive provision of the legislation itself. In such cases, if the term is used throughout the legislation it could be included in the definitions section, with a cross reference to the substantive section. For example, South Africa's National Environmental Management: Protected Areas Act 2003 provides in its definitions section that "'nature reserve' means [...] an area declared, or regarded as having been declared, in terms of section 23 as a nature reserve" (see the South Africa case study accompanying these guidelines: Paterson, 2010).
- 29 It is worth listing some working definitions that are foundation terms in most jurisdictions and should be considered in an appropriate form, consistent with local legal practice:
- **Land**, to the extent appropriate, should be defined to include the airspace above the land, as well as subsoil and any body of water connected with the land.
 - **Marine or sea**, to the extent appropriate, should be defined to include airspace above the sea, the seabed and subsoil, as well as the water column.
 - **Person** includes individuals, communities, corporations and other legal persons. This would cover all entities that have a legal identity recognized under the law such as for-profit corporations and not-for-profit corporations including NGOs. It would also cover communities that are incorporated or have legal identity.

2.1.2 International definitions

- 30 It is worthwhile to list some of the important international definitions that the legal drafter working with protected area authorities may find useful to incorporate in protected areas legislation. The terms below are derived mostly from the international conventions and programmes discussed in Part I. The list is not exhaustive, but illustrative. The legal drafter should review international treaty and policy commitments relevant to the jurisdiction, to decide if certain definitions are necessary or appropriate to incorporate in domestic legislation, either directly or by reference to the relevant treaty or policy. The definitions listed below are separated into those defined by international treaty and those defined by international policy or guidelines.
- 31 **Definitions in international treaties.** The following definitions from international treaties are important to take into account when drafting protected areas legislation:
- **Biological diversity or biodiversity** means the variability among living organisms from all sources including, among other things, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part, and diversity within species, between species and of ecosystems (CBD, Art. 2).
 - **Biological resources** includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity (CBD, Art. 2).
 - **Cultural heritage**, in relation to properties eligible as world heritage sites, means monuments, groups of buildings and sites that are works of man or the combined works of nature and man, including archaeological sites, which are of outstanding universal value (WHC, Art. 1; for the World Heritage Convention guidelines definition of 'outstanding universal value', see paragraph 32, below).
 - **Ecosystem** means a dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit (CBD, Art. 2).

- **Habitat** means the place or type of site where an organism or population of species naturally occurs (CBD, Art. 2).
- **In-situ conservation** means the conservation of ecosystems and natural habitats, and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties (CBD, Art. 2).
- **Living modified organism** (LMO) means any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology (Cartagena Protocol to the CBD, Art. 3(g)). In many countries, the terms ‘genetically modified organism’, ‘genetically engineered organism’ or ‘transgenic organism’ are widely used, including in domestic legislation, to describe LMOs covered by the Cartagena Protocol (MacKenzie et al., 2003).
- **Migratory species** means the entire population or any geographically separate part of the population of any species or lower taxon of wild animal, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries (CMS, Art. 1(a)).
- **Natural heritage**, in relation to properties eligible as world heritage sites, means natural features, geological and physiographical formations, and natural sites or precisely delineated natural areas of outstanding universal value (WHC, Art. 2; for the World Heritage Convention guidelines definition of ‘outstanding universal value’, see paragraph 32, below).
- **Protected area** means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives (CBD, Art. 2); see also the 2008 IUCN World Commission on Protected Areas (WCPA) definition below, which provides further guidance.
- **Sustainable use** means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations (CBD, Art. 2).
- **Wetlands** means areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6 m (Ramsar Convention, Art. 1).

Definitions in international guidelines. The following definitions provided in international guidelines are important to take into account when drafting protected areas legislation:

32

- **Biosphere reserve** means an area of terrestrial, coastal or marine ecosystems, or a combination thereof, which is internationally recognized within the framework of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Man and the Biosphere (MAB) Programme for designation as part of the Worldwide Network of Biosphere Reserves (UNESCO, 1995, Art. 1).
- **Buffer zone** means an area around a core protected area that is managed to help maintain protected area values (IUCN-WCPA guidelines, Dudley, 2008).
- **Co-managed protected areas** are protected areas where management authority, responsibility and accountability are shared among two or more stakeholders, including government bodies and agencies at various levels, indigenous and local communities, NGOs and private operators, or even among different state governments as in the case of transboundary protected areas (TBPAs) (IUCN-WPC 2003 V.25).
- **Customary law** means law consisting of customs that are accepted as legal requirements or obligatory rules of conduct; practices and beliefs that are so vital and intrinsic a part of a social and economic system that they are treated as if they were laws (SCBD, 2004a),
- **Ecological corridor** or **biodiversity corridor** means an area of suitable habitat or habitat undergoing restoration, between two protected areas or linking two or more protected areas, that

allows interchange of species, migration or genetic exchange (IUCN-WCPA guidelines, Dudley, 2008).

- **Ecosystem approach** means a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way (CBD COP 2004 VII/11).
- **Environmental impact assessment (EIA)** means a process of evaluating the likely environmental impact of, and proposing appropriate mitigation measures for, a proposed development, taking into account interrelated socio-economic, cultural and human health impacts, both beneficial and adverse (SCBD, 2004a).
- **Invasive alien species (IAS)** means an alien species whose introduction or spread threatens biological diversity; **alien species** means a species, subspecies or lower taxon, introduced outside its natural past or present distribution, including any part, gametes, seeds, eggs or propagules of such species that might survive and subsequently reproduce (CBD COP 2002 VI/23; for the purposes of this decision, the term ‘invasive alien species’ is the same as ‘alien invasive species’) (synonyms include ‘exotic’, ‘introduced’ or ‘non-native’; see Tu, 2009).
- **Outstanding universal value** means “cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity” (UNESCO, 2008b, para. 49).
- **Protected area** means a clearly defined geographical space recognized, dedicated and managed, through legal and other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (IUCN-WCPA guidelines, Dudley, 2008). The 2008 IUCN-WCPA definition updates and amplifies the definition adopted by the IUCN General Assembly in 1994. The 1994 definition defines a protected area as: “An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means” (IUCN, 1994). The 2008 IUCN-WCPA guidelines for protected area management categories (Dudley, 2008) define each of the principal terms used in the 2008 definition, which is helpful both for countries that have applied the 1994 definition and for those considering a new definition. The 2008 definition is the operational definition used by IUCN in its work on protected areas and is the definition used for these protected areas legislation guidelines.

2.2 Application of the law

- 33 The legislation should contain a section (either in a preliminary or concluding part, or in a schedule) identifying the application of the protected areas legislation in relation to other legislation. In any document presenting the proposed draft legislation, the legal drafter should explicitly recommend amendments, repeals or other measures that may be required in other legislation to ensure compatibility. With respect to potential overlap or conflict, the section should include the following kinds of considerations, as relevant:
- 34 **Scope of legislation.** The legislation may apply to an entire country or jurisdiction, or to a distinct part of the country or jurisdiction (for example, where the legislation is site-specific). As appropriate, clarifying information may need to be included with respect to special areas such as islands, marine zones or military sites, and the effect on legislation of other jurisdictions, for example in federal states where both the federal and provincial levels may have authority to enact protected areas legislation. In drafting provisions on the scope of legislation that includes MPAs, the legal drafter will want to be

clear that it covers marine areas out to the extent of the state's jurisdiction, whether territorial sea or exclusive economic zone (EEZ), consistent with national law.

Relation to umbrella environmental legislation. The protected areas legislation should be put in context with other environmental legislation in force and it should be clear how the protected areas law relates to these legal frameworks. Other legislation may include a national environmental protection law, national biodiversity law, or pollution control or environmental assessment law. Normally, protected areas legislation is to be applied in a manner consistent with other umbrella environmental legislation unless there is a conflict, uncertainty about specific applications, or outdated environmental legislation, in which case the protected areas legislation would prevail. 35

Areas of overlap or conflict. Protected areas legislation should include a general provision stating that in the event of a conflict between the protected areas legislation and other national legislation which could threaten the conservation objectives of the protected areas system (or a specific site), the protected areas legislation should prevail. If such a provision is not included, many jurisdictions apply the doctrine of implied repeal as accepted legal practice. This doctrine, used especially in common law countries, provides that if the provisions of a later statute are contrary to the provisions of an earlier statute, the later statute by implication repeals the earlier statute. Therefore, if the provisions of the protected areas legislation conflict with sections of earlier statutes, the earlier statutes would be treated as repealed. To minimize uncertainty and avoid the need to apply this doctrine, however, it is important that the legal drafter identify as completely as possible legislation or regulations that will need to be repealed or amended with the enactment of strengthened or new protected areas legislation. 36

Repeals and revisions of other laws. There may be clearly identified conflicts or concurrent mandates in other laws or regulations that should be expressly repealed or amended to prevent or avoid future problems in application. In such cases, it is advisable as a safeguard to include a more specific provision in the main body of the legislation or in a schedule, identifying sections of other laws that need repeal or revision, or entire laws that may need repeal with the enactment of the protected areas law at some specified future time, perhaps with a transition period as relevant. 37

Relation to other resource-sector laws. Other laws where specific areas of overlap or conflict may need to be addressed involve sectors with authority to designate protected areas, for example, forestry, fisheries, wildlife management or water resource management. In some cases, a new protected areas law may incorporate such provisions into a consolidated legal framework and the relevant sections of the resource-specific laws would be repealed. Laws and regulations related to economic development could also defeat or threaten the conservation objectives of protected areas if not harmonized through revisions or clarifying instructions. These other sectors may include legislation in agriculture, transportation, energy, land use, industrial and residential development, coastal development, tourism, mining, and other extractive activities. 38

Specific regulations or other subsidiary legislation governing such sectors should be harmonized as well. Examples of regulations in other sectors that may need harmonization include fire management, weed control, use of pesticides or other agricultural chemicals, control of LMOs, control of IAS, discharge of pollutants, placement of landfills, or treatment and disposal of sewage. 39

Coordination and consultation required. The legislation could also stress the need for coordination and consultation where there are overlapping regulatory duties. A provision could state that where government officials, acting pursuant to their legislative authority, plan an action that could be detrimental to the objectives of the protected areas system or a specific site, prior consultation with and consent from the protected areas authority are required. Where such measures are not taken or are unsuccessful, the matter should be brought before the higher policy level, normally 40

the minister or ministers responsible, for resolution. (See also section 4.5, below, on coordination mechanisms.)

3 Policy and objectives

3.1 Supportive national policy

- 41 National-level policy for biodiversity and nature conservation provides a foundation for protected areas legislation. While not legally binding in itself, a statement of the relevant national policy provides an enabling environment for enacting new or revised legislation. A policy may be transformed into an overarching goal for the legislation, from which more specific objectives (or objects) are defined. This is important to establish links between broader national goals and those of the protected areas legislation. For example, a national policy might be as broad and general as a commitment to conserve and protect nature and biodiversity throughout the country for the benefit of the people. This might then be translated into a goal in the legislation to conserve nature and biodiversity through a national system of protected areas. A policy statement in legislation might be expanded beyond this basic goal to include references to other relevant goals for the protected areas legislation such as giving effect to international law obligations or strengthening the role of communities, indigenous or traditional peoples, and private landholders in nature and biodiversity conservation.
- 42 Not all jurisdictions employ the legal practice of including a formal policy statement in legislation. Instead, relevant national policies are identified in background documents that accompany the draft legislation through the technical and policy review process. Some countries give the legislation both a short title and a long title to highlight the overall policy and goals of the legislation. Other jurisdictions may include a preamble in their legislation and use that provision to identify key national policies underpinning the protected areas legislation. In some cases, there may be no formal policy in place at the time of adoption of the legislation, and the law itself may require that a policy be adopted and updated periodically as needed. A consultative process may be set out for this purpose.
- 43 **Sources of policy.** There are several official sources that may contain statements of national policy. These include national policy documents and constitutional provisions. Multilateral treaty obligations and commitments to international policy statements provide an important source for protected areas policy as well. These include the treaties and policies reviewed in Part I, sections 5–7.
- 44 National policy documents are typically the main source for policy supporting protected areas legislation. Ideally, protected areas policy will be stated in a distinct policy document with background, goals, purposes, objectives and required actions (including enacting supportive legislation) to meet national goals and international obligations. National policy documents that provide umbrella coverage, such as national sustainable development strategies, or more focused coverage, such as national biodiversity strategies, will also provide useful policy language that can be adapted to a preamble, preliminary provision or accompanying background document to new protected areas legislation as it moves through to enactment.

3.2 Constitutional principles

- 45 Most constitutions provide a full range of fundamental principles, some of which may be important to draw upon when drafting policy language for protected areas legislation or supporting documents accompanying draft legislation through its review and enactment. In particular, constitutional provisions

may exist on rights and responsibilities concerning the environment in general, or nature and biodiversity conservation in particular (see Box III(1)-1).

Box III(1)-1: Constitutional provisions on protected areas and conservation

Angola (1992). Article 24-2: The State shall take the requisite measures to protect the environment and national species of flora and fauna throughout the national territory and maintain ecological balance.

Bulgaria (1991, as amended up to 2006). Article 15: The Republic of Bulgaria shall ensure the protection and restoration of the environment, the conservation of living nature in all its variety, and the sensible utilization of the country's natural and other resources.

Colombia (1991, as amended up to 2005). Article 79: Every individual has the right to enjoy a healthy environment. The law will guarantee the community's participation in the decisions that may affect it. It is the duty of the State to protect the diversity and integrity of the environment, to conserve areas of special ecological importance, and to foster education for the achievement of these ends.

El Salvador (1983, as amended up to 2003). Article 117: It shall be the State's duty to protect the natural resources, as well as the diversity and integrity of the environment, and to guarantee sustainable development. The protection, conservation, rational enjoyment, and restoration or replacement of natural resources is hereby declared to be of social interest in accordance with the terms established by law.

France (2005). Article 6 (Environmental Charter): Public policies shall promote sustainable development. To this end they shall reconcile the protection and enhancement of the environment with economic development and social progress.

Guyana (1980, as amended up to 2003). Article 36: The well-being of the nation depends upon preserving clean air, fertile soils, pure water and the rich diversity of plants, animals and ecosystems.

Article 149J (1): Everyone has the right to an environment that is not harmful to his or her health or well-being.

(2) The State shall protect the environment, for the benefit of present and future generations, through reasonable legislative and other measures designed to

- (a) Prevent pollution and environmental degradation;
- (b) Promote conservation; and
- (c) Secure sustainable development and use of natural resources while promoting justifiable economic and social development.

(3) It shall not be an infringement of a person's rights under paragraph (1) if, by reason only of an allergic condition or other peculiarity, the environment is harmful to that person's health or well-being.

Malawi (as amended up to 1998). Section 13: The State shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at achieving the following goals [...]

- (d) The Environment. To manage the environment responsibly in order to [...]
 - iv. conserve and enhance the biological diversity of Malawi.

Nigeria (1999). Section 20: The State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.

Paraguay (1992). Article 7: Everyone has the right to live in a healthy, ecologically balanced environment. The preservation, recovery and improvement of the environment, as well as efforts to reconcile these goals with comprehensive human development, are priority objectives of social interest. The respective laws and government policies will seek to meet these objectives.

Peru (1993). Article 68: The State is obliged to promote the conservation of biological diversity and protected natural areas.

Slovenia (2006). Article 73: Everyone is obliged in accordance with the law to protect natural sites of special interest, rarities and cultural monuments. The state and local communities shall promote the preservation of the natural and cultural heritage.

South Africa (1996, as amended up to 1997). Article 24: Everyone has the right —

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that —
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Source: FAOLEX website; Wolfrum and Grote, 1971.

46 It is also important to keep in mind that constitutional provisions may be legally enforceable through the judicial process. For example, constitutional challenges may be made to government decisions that affect the fundamental rights and freedoms of individuals or groups. Challenges may also be made to legislation on the grounds that it conflicts with provisions of the constitution. For this reason, it is important for the legal drafter to understand the applicable constitutional framework and identify, where possible, specific constitutional provisions and principles that support the protected areas legislation and the fundamental purposes it aims to advance. These measures not only ground the legislation in the constitution, they also help prevent or withstand possible constitutional challenges.

Box III(1)-2: Constitutional provisions on indigenous peoples' rights to traditional lands

Argentina (1994). Section 75, Paragraph 17: To recognize the ethnic and cultural pre-existence of indigenous peoples of Argentina. To guarantee respect for the identity and the right to bilingual and intercultural education; to recognize the legal capacity of their communities, and the community possession and ownership of the lands they traditionally occupy; and to regulate the granting of other lands adequate and sufficient for human development; none of them shall be sold, transmitted or subject to liens or attachments. To guarantee their participation in issues related to their natural resources and in other interests affecting them. The provinces may jointly exercise these powers.

Brazil (1988, as amended up to 2008). Title VIII, Article 231: The social organization, customs, languages, creeds and traditions of Indians are recognized, as well as their original rights to the lands they traditionally occupy. The Union has the responsibility to delineate these lands and to protect and ensure respect for all their property. 1. Lands traditionally occupied by Indians are those on which they live on a permanent basis, those used for their productive activities, those indispensable for the preservation of environmental resources necessary for their well-being and those necessary for their physical and cultural reproduction, according to their uses, customs and traditions.

Colombia (1991, as amended up to 2005). Article 330: The exploitation of the natural resources in indigenous territories will be done without impairing the cultural, social and economic integrity of the indigenous communities. In the decisions adopted with respect to said exploitation, the Government will encourage the participation of the representatives of the respective communities.

Fiji (1988). Section 186: Customary laws and customary rights.

(1) The Parliament must make provision for the application of customary laws and for dispute resolution in accordance with traditional Fijian processes.

(2) In doing so, the Parliament must have regard to the customs, traditions, usages, values and aspirations of the Fijian and Rotuman people.

Marshall Islands (1979, as amended up to 1990). Article X, Section 1: Nothing in Article II shall be construed to invalidate the customary law or any traditional practice concerning land tenure or any related matter in any part of the Republic of the Marshall Islands including, where applicable, the rights and obligations of the Iroijlaplap, Iroijedrik, Alap and Dri Jerbal.

Section 2: Declaration of customary law. In the exercise of its legislative functions, it shall be the responsibility of the Nitijela (parliament), whenever and to the extent considered appropriate, to declare, by Act, the customary law in the Republic of the Marshall Islands or in any part thereof. The customary law so declared may include any provisions which, in the opinion of the Nitijela, are necessary or desirable to supplement the established rules of customary law or to take account of any traditional practice.

Philippines (1987). Article 2, Section 22: The State recognizes and promotes the rights of indigenous cultural communities within the framework of national unity and development.

Source: FAOLEX website; Wolfrum and Grote, 1971.

47 Most modern constitutions spell out the fundamental rights and responsibilities of citizens and the government and, where relevant, may recognize certain traditional rights and the application of customary law. Some constitutions recognize the rights of indigenous peoples to manage their traditional lands, a legal right important for governance arrangements should such lands be recognized as part of the formal protected areas system (see Box III(1)-2).

3.3 Overall objectives

Protected areas legislation usually contains provisions identifying specific objectives (or objects) of the law. Objectives spell out the main purposes and intent of the law. Normally, objectives are sufficiently clear to guide implementation and serve as the framework for judging whether actions and decisions are in accordance with the law, both at the administrative level and where there may be a legal challenge requiring judicial review. In some cases, objectives are tied to basic principles such as sustainable development, or elaborations of this concept such as the principle of ecologically sustainable development (discussed further in section 3.4, below). The objectives may also serve as a framework for applying protected area categories, developing implementation strategies, and evaluating performance and effectiveness. In addition, a well-defined set of objectives enables protected area entities to act with authority in addressing cross-sectoral or other interests. 48

The most direct approach for incorporating objectives into protected areas legislation is to include a legal provision entitled 'Objectives'. Where a particular protected area has its own legislation (for example, the Great Barrier Reef Marine Park in Australia), that instrument should also include a clear statement of objectives for the area to guide its management and maintenance. 49

Where sufficient scientific information is available, objectives may include targets that help guide monitoring and future evaluation. Such provisions could emphasize, for example, protecting or restoring the habitat of endangered species, protecting unique and threatened ecosystems, or preserving landscapes or seascapes of special natural and cultural value. Regardless of the level of specificity in the legislation, scientific, economic and cultural information should be used to frame the objectives. 50

Consistent with international principles, the legislation should clearly state that only those areas where the primary objective is the long-term conservation of nature and associated ecosystem services are recognized as protected areas within the formal system. Many such protected areas may have other goals as well but, in the case of conflict, nature conservation should be the priority. Taking the IUCN definition as the baseline (see Part I, section 1), nature conservation includes biodiversity and geodiversity conservation, and may also include cultural values. With that baseline in mind, provisions on objectives may contain a combination of science-based conservation objectives and other objectives tied to social and economic values and benefits. 51

Additional objectives may include providing on-site goods and services, such as plant and animal products, or recreation and tourism. The provision of off-site goods and services, such as maintaining and restoring ecosystems and functions, is also normally an important objective. The provision of non-material benefits, such as social well-being or mental health, is being increasingly recognized as an objective as well. Other objectives may relate to ensuring good governance and the participation of communities, indigenous and traditional peoples, and private entities in protected area establishment and management. 52

Objectives may include purposes associated with fulfilling obligations under multilateral treaties or other instruments that bind the country legally. For example, on a global level, the Convention on Biological Diversity (CBD) (1992) lays out the specific obligations of Parties for in-situ conservation (see Part I, Box I-5). Regionally, legally-binding instruments such as the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979), or instruments such as the European Union (EU) Habitats Directive also provide examples of language that may be useful for drafting provisions on objectives in national protected areas legislation. As a drafting rule, national objectives must not be weaker than those determined by international or regional instruments in force domestically. Significant 53

treaties or other legal instruments may be incorporated by reference in the objectives provisions or cross-referenced to a schedule, as appropriate.

- 54 The legal drafter should work closely with the lead protected areas agency when drafting provisions on objectives. That agency should provide content and agree with the formulation in law since, either directly or in an oversight capacity, it will ultimately be responsible for implementation and be held accountable. Consultations should also be undertaken within the government, and with other interested or involved communities, groups and individuals.
- 55 Examples of objectives are provided below to illustrate the variety of ways in which they may be expressed in protected areas legislation. The examples begin with an emphasis on broad nature conservation objectives, followed by more targeted nature conservation objectives. Thereafter, examples are provided of social and governance-oriented objectives. Typically, protected areas legislation would include a manageable mix of objectives that best reflects the overall intent of the legislation, leaving details to other provisions or subsidiary rules or guidance. Publications from IUCN and other international organizations elaborate on the many values and benefits from protected areas that may be reflected in the objectives of the legislation (see, for example, Barber et al., 2004).
- 56 **Primary objective.** Broadly speaking, the primary objective for protected areas is the long-term conservation of nature, including biodiversity and geodiversity, with associated ecosystem services and cultural values.
- 57 **General nature conservation objectives** flowing from the primary objective could include the following:
- (a) establish and maintain a comprehensive, adequate and representative system or network of protected areas for important terrestrial, marine and freshwater ecosystems and species;
 - (b) establish and maintain a national system or network of protected areas to realize the full range of nature conservation objectives from strict protection to multiple use;
 - (c) establish and manage protected areas to take full advantage of their scientific, educational, recreational, cultural, social, historical or archaeological significance, consistent with their primary conservation objectives and the goals of the protected areas system;
 - (d) promote a national policy to prevent, control and contain IAS that may have detrimental effects on biodiversity and protected areas, and implement this policy in all relevant aspects with the establishment and management of the protected areas system and individual sites.
- 58 **Targeted nature conservation objectives** to give emphasis to specific purposes could include the following:
- (a) give effect to the country's international obligations;
 - (b) protect and restore irreplaceable habitats and ecosystems with unique characteristics that cannot be replicated through the conservation of other areas;
 - (c) protect endangered, threatened and endemic species, giving highest priority to locally and globally endangered species and their habitats;
 - (d) conserve habitats required for the maintenance of viable populations of migratory species;
 - (e) preserve and maintain small specified areas deserving special protection for their high natural and cultural significance or other pertinent value for present and future generations;
 - (f) protect special landscapes and seascapes and their associated ecosystems to provide vital ecosystem services and economic livelihoods;
 - (g) protect and preserve large, intact and relatively unfragmented natural areas and natural ecosystems under high levels of threat;

- (h) promote an ecosystem approach to nature conservation by linking protected areas to form ecological networks and integrating protected areas into the broader landscape and seascape;
- (i) use buffer zones and connecting corridors to support connectivity conservation as part of the protected areas system;
- (j) provide refugia and space for range expansion for species, to account for the impact of climate change;
- (k) design and manage the protected areas system and individual sites to strengthen resilience of ecosystems and species in the face of climate change and other global change factors, and provide flexibility for adaptive management to accommodate change.

Objectives related to ecosystem services and functions could include the following:

59

- (a) conserve and maintain terrestrial and marine protected areas to secure and strengthen their role in climate regulation through carbon sequestration and other processes;
- (b) protect natural ecological processes that generate and maintain biodiversity and provide humanity with vital ecosystem services, including:
 - hydrological benefits associated with controlling water flows and maintaining and improving water quality;
 - protection of habitat for useful predators, pollinators and dispersal agents;
 - reducing sedimentation, and maintaining soil and land productivity;
 - disaster prevention through watershed protection to reduce the risk of floods and landslides;
- (c) conserve and maintain coastal and marine protected areas (including coral reefs and deepwater sites) to secure the specific ecosystem services and functions they provide, including:
 - shoreline maintenance, flood and storm protection, wetland and estuary protection, and disaster mitigation in the case of extreme weather events;
 - sand production, nutrient cycling, waste assimilation and water quality maintenance;
 - provision of reproductive habitat for economically useful marine living resources including fish.

Broad social and governance objectives may also be important to consider including in protected areas legislation. A few examples are as follows:

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- (a) provide for the sustainable use of a protected area, consistent with the primary conservation purposes of the area;
- (b) provide for the maintenance of ecosystem services and natural resources, consistent with conservation objectives, to maintain livelihoods, promote sustainable development and help societies adapt to climate change;
- (c) provide protection, consistent with conservation objectives, for cultural values (historical, archaeological, landscape, seascape, sacred, aesthetic);
- (d) promote recreational opportunities for local visitors and visitors from afar;
- (e) ensure full participation by all segments of society in the establishment and management of protected areas;
- (f) ensure the equitable sharing of benefits from allowed uses of protected areas;
- (g) recognize a variety of governance arrangements for protected areas, including voluntarily conserved areas of local communities, indigenous peoples and private persons or groups, as long as such areas fit the protected area definition and meet the requirements of the legislation;
- (h) promote intergovernmental cooperation and co-management by multiple agencies and entities;
- (i) protect economically useful species, genes and genomes for food, fibre, medicine and scientific research;

Box III(1)-3: Objectives and principles in Australian legislation

The Environment Protection and Biodiversity Conservation Act 1999 spells out the following objectives and principles (ss. 3, 3A):

3 Objects of Act:

(1) The objects of this Act are:

- (a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and
- (b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and
- (c) to promote the conservation of biodiversity; and
- (ca) to provide for the protection and conservation of heritage; and
- (d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples; and
- (e) to assist in the co-operative implementation of Australia's international environmental responsibilities; and
- (f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and
- (g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

(2) In order to achieve its objects, the Act: [...]

(e) enhances Australia's capacity to ensure the conservation of its biodiversity by including provisions to:

- (i) protect native species (and in particular prevent the extinction, and promote the recovery, of threatened species) and ensure the conservation of migratory species; and
- (ii) establish an Australian Whale Sanctuary to ensure the conservation of whales and other cetaceans; and
- (iii) protect ecosystems by means that include the establishment and management of reserves, the recognition and protection of ecological communities and the promotion of off-reserve conservation measures; and
- (iv) identify processes that threaten all levels of biodiversity and implement plans to address these processes; and

(f) includes provisions to enhance the protection, conservation and presentation of world heritage properties and the conservation and wise use of Ramsar wetlands of international importance; and [...]

(g) promotes a partnership approach to environmental protection and biodiversity conservation through:

- (i) bilateral agreements with States and Territories; and
- (ii) conservation agreements with land-holders; and
- (iii) recognising and promoting indigenous peoples' role in, and knowledge of, the conservation and ecologically sustainable use of biodiversity; and
- (iv) the involvement of the community in management planning.

3A Principles of ecologically sustainable development

The following principles are *principles of ecologically sustainable development*:

- (a) decision-making processes should effectively integrate both long term and short-term economic, environmental, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- (e) improved valuation, pricing and incentive mechanisms should be promoted.

Source: EPBC Act, ss. 3, 3A.

- (j) protect areas for the non-material values they may provide to communities and individuals through culture, knowledge, memories, spiritual meaning, social well-being, mental and physical health, and existence values.

3.4 Principles associated with objectives

Objectives may include principles to serve as underlying goals, such as sustainable development, or as fundamental processes to be used, such as good governance or science-based decision making. Commonly, such principles are included without elaboration where the concept is philosophical or is assumed to have a general meaning, as an aspiration or goal to be applied according to ordinary understanding. There may be situations, however, where these principles are intended to carry a more specialized meaning and to serve as measurable benchmarks for effectiveness. In such instances, the principles should be elaborated in substantive provisions with sufficient clarity to ensure consistency of understanding and application throughout the legislation.

61

In view of the central importance of the objectives section for defining the overall purposes and intent of the protected areas legislation, the legal drafter may want to incorporate several internationally recognized principles applicable to all actions taken in pursuit of the objectives. A number of core principles should be incorporated throughout the relevant sections of protected areas legislation. As discussed in Part I, these include:

62

- (a) application of the precautionary principle in decision making, particularly where consequences may be irreversible;
- (b) informed and science-based decision making for the conservation and management of protected areas;
- (c) public participation in government decisions, including providing meaningful comments and assurances that these comments will be taken into account;
- (d) timely access to accurate and relevant public information about decisions being considered by the government in order to ensure meaningful participation;
- (e) social equity and justice in the context of conservation and management of protected areas so that costs and benefits are shared fairly, with provisions for participation, negotiation and prior informed consent, and access to judicial processes so that fair and equitable distribution is impartially enforced.

An illustration of legislation that links the implementation of objectives to principles is Australia's Environment Protection and Biodiversity Conservation Act 1999 (see Box III(1)-3). Keeping in mind that the Australian legislation is an omnibus environmental act with much broader scope than typical protected areas legislation, the Act is instructive on how the two concepts are used together. The Act ties its conservation objectives to the principle of 'ecologically sustainable development' which is also defined separately in terms of its constituent parts. It is worth noting that these sections include several elements related to the Commonwealth government's role and environmental responsibilities, including some that are directly relevant for protected areas. Australian legislation also includes specific management principles for particular types of protected areas in its Environment Protection and Biodiversity Conservation Regulations 2000. (For an analysis of Australian law relevant for protected areas, see the Australia case study accompanying these guidelines: Boer and Gruber, 2010a.)

63

4 Institutional arrangements

4.1 General considerations

- 64 Institutional arrangements for the formal protected areas system and its sites will vary from country to country, depending on the form of government and its organizational structure, ministerial portfolios, available finances, capacities of existing protected area authorities, community and private involvement in protected areas management, and commonly accepted practice. Another important factor to be taken into account when defining institutional arrangements is the governance approaches to protected areas that may be recognized as part of the formal protected areas system. In addition, for federal states and decentralized forms of government, the subject of protected areas may fall under multiple jurisdictions, in whole or in part. For instance, in Canada, federal protected areas account for about half of the country's terrestrial protected areas (covering about 47 million hectares) and are managed mostly by the federal Environment Canada (for wildlife reserves and federal wetlands) and the federal Canada Parks Agency (for national parks), while protected areas managed by provincial and territorial governments collectively cover about the same area. Aboriginal authorities and private owners also govern and manage some protected areas although the area covered is very limited. (For an analysis of Canada's federal protected areas legal framework and that of one of its provinces, Ontario, see the case studies accompanying these guidelines: Benidickson, 2010a; and Benidickson, 2010b.)
- 65 Whatever the institutional arrangement for protected areas used in a particular country, assignment of powers and responsibilities must be clear. This is essential for establishing accountability. Protected areas legislation should identify the institution (or, where necessary, establish an entity) responsible for the overall protected areas system. Similarly, if different sites are to be managed by different protected area authorities, as may often be the case especially for marine areas, the legislation should clearly provide for the designation of such authorities and specify the powers and responsibilities involved. If the legislation is vague or incomplete in this regard, the overall conservation objectives and purposes of the law, as well as the protected areas system or sites under the law, may be seriously jeopardized owing to the lack of clear accountability. When developing provisions on institutional arrangements it is also important for the legal drafter to keep in mind that 'protected area authorities', as defined by the Vth IUCN World Parks Congress (WPC), refers to the full range of organizations that may be managing or co-managing protected areas, including governments at all levels from national to local; the private sector, whether corporation, individual landowner, or NGO, particularly with a private protected area (PPA); and indigenous peoples or local communities (Durban Action Plan, IUCN-WPC 2004, p. 227, fn. 6).
- 66 **Structural options.** The overall institutional framework may consist of a variety of entities. Many countries have the legal tradition of creating special, semi-independent statutory bodies (sometimes called national trusts) with the specific power to manage the protected areas system or parts of the system in conjunction with other authorities. Various administrative, scientific, management, enforcement, financial and other responsibilities may be delegated. Advisory bodies and consultative arrangements may be used to provide scientific or technical assistance, represent special interests, or harmonize activities across sectors. Voluntarily conserved areas may be recognized as part of the formal protected areas system where the local communities, indigenous or traditional peoples, or private landowners involved have full or partial management responsibilities.
- 67 Variations in institutional arrangements provided by legislation for the governance of the protected areas system include the following:
- (a) strong central authority (governmental, statutory corporation or mixed) with delegation of staff and

- resources directly from headquarters on all matters;
- (b) central authority with overall power, and decentralized units for the management of specific sites, supervised from the centre;
 - (c) single central authority for policy oversight and coordination, and strong decentralized and independently operating institutions with their own staff and institutional resources for specific regions or sites;
 - (d) multi-agency authority (for example, an inter-agency commission or board) at the central or decentralized level with overall decision-making powers for system-wide planning, management and coordination, with delegation of responsibilities for management of individual sites to other governmental or non-governmental entities;
 - (e) any of the options above for centralized oversight, with individual site management including local government authorities, local community entities and indigenous or traditional peoples managing or co-managing their own conserved areas that have been recognized as part of the protected areas system;
 - (f) any of the options above for centralized oversight, with individual site management including private landowners managing or co-managing their own conserved areas that have been recognized as part of the protected areas system.

Distribution of powers and responsibilities. The legal drafter working with protected area authorities should give careful consideration to the powers and responsibilities of the various institutions that are to be involved in the establishment, management or oversight of the protected areas system and sites. The legislation must contain clear provisions identifying which institution has which powers and responsibilities, and the extent of these powers and responsibilities, in order to facilitate effective implementation and ensure accountability. The main areas where powers and responsibilities need attention include:

68

- (a) ministerial involvement directly or by delegation;
- (b) levels of government involved and appropriate powers and functions at each level;
- (c) specialized agency versus statutory corporation option;
- (d) distribution of powers and responsibilities between centralized and decentralized levels;
- (e) variety of governance arrangements available for the distribution of some powers and responsibilities;
- (f) clear assignment of decision-making powers in relation to key functions (policy, planning, management, advisory, coordination, compliance and enforcement);
- (g) clear assignment of overall accountability for the protected areas system, and accountability at the level of individual sites;
- (h) authority for the delegation of powers and duties, and existing or potential entities involved;
- (i) harmonization and coordination with other institutional authorities at all levels.

4.2 Nature of authority

4.2.1 High policy level

Many institutional approaches are possible for establishing protected areas and allocating overall responsibility for implementing the legislation, and each jurisdiction must choose its own appropriate arrangements. An important general principle, however, is that a high-level policy authority within the government should have ultimate responsibility for the national system of protected areas. Generally, this is a minister responsible for protected areas. This might be a minister of environment, natural resources, agriculture or fisheries, or another official of equivalent level in a sector compatible with

69

protected area conservation objectives and purposes. In some countries, this responsibility might be assumed by the head of state or prime minister.

70 In some jurisdictions, matters related to protected areas may involve more than one minister. For example, protected areas may fall generally under the ministry of environment, but forest reserves may be under the ministry of agriculture and fisheries reserves under the ministry of fisheries. If the national policy for protected areas is to bring various types of protected areas under a single legal framework, it may be important to consider creating a high-level commission or board, comprised of the ministers involved and responsible directly to the head of state or prime minister. Such a policy body may be charged with overseeing the entire system and providing coordination to harmonize potential overlaps of competence and reduce or prevent conflict. Alternatively, if so decided at the policy level, protected area responsibilities under the various ministries might be consolidated under one lead ministry in charge of nature and biodiversity conservation.

Box III(1)-4: Key ministerial-level powers and duties

Examples of the main powers and duties of the minister in charge, or other equivalent high-level policy position, include:

- approve protected areas system plan;
- approve proposals and designate new sites or amended sites in accordance with the legislation;
- approve site management plans;
- oversee and give direction to boards of statutory corporations established for the protected areas system;
- pursue cooperation and consultation at the policy level on all matters affecting or affected by protected areas;
- approve co-management and conservation agreements as provided by the legislation;
- approve recognition of areas conserved by indigenous peoples, local communities or private entities to be part of the protected areas system when legal requirements are met, and approve arrangements for their continued governance;
- set up advisory committees pursuant to the legislation;
- approve and defend budgets of protected area authorities;
- make rules and regulations for matters covered by the legislation;
- delegate and assign powers and duties.

71 Where consistent with legal practice, the ministerial or other policy-level position could be identified in the legislation. An alternative, where ministerial or executive portfolios are subject to change from time to time, would be for the legislation to designate overall authority to the ‘minister for the time being responsible for matters covered by this Act’, or to use a similar formulation.

72 The overriding executive duty at this ministerial level is to carry out all actions and decisions in a manner consistent with and in furtherance of the long-term objectives of the protected areas system and specific sites. Among other things, the minister in charge should represent the protected areas programme at the highest policy level, help develop and defend a favourable policy environment overall, defend financial sustainability for the protected areas system, harmonize policies with other legislation, and maintain ministerial-level consultations to give the legislation full effect (see Box III(1)-4).

4.2.2 Lead protected areas agency

A lead protected areas agency should be identified and designated in the legislation. Normally, such an entity has overall responsibility for the protected areas system, and is accountable and directly answerable to the minister in charge. The authority may be an existing government agency or department responsible for parks, wildlife, fisheries, conservation or other appropriate portfolio, or a new agency may need to be created. Many jurisdictions set up statutory corporations for this purpose. Whatever the arrangement, the lead agency should have the clear mandate, scientific competence, technical expertise and public purpose to effectively carry out the objectives and purposes of the legislation. Peru, for example, took a major institutional step in 2008, creating a new specialized technical body, the National Protected Areas Service, to manage the national protected areas system. As one of the world's 17 megadiverse countries, according to the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC), Peru has nearly 20 million hectares or about 16 per cent of its total area within the protected areas system, including public, private and community-conserved sites. In May 2008, a new Ministry of Environment was created by legislative decree and the new Service was established under this ministry. Previously, protected area responsibilities had been held by the Minister of Agriculture. (See the Peru case study accompanying these guidelines: Solano, 2010.)

73

The government may choose to place responsibility for the management of the protected areas system within an umbrella entity responsible for biodiversity conservation or environmental protection. Under such an approach, it is important that protected area functions have strong representation in order to be able to compete effectively as one of many priorities and potentially competing interests. Placing protected area responsibilities in a larger umbrella institution facilitates integration and harmonization with overall conservation policy, and allows sharing of costs and expertise. From the management perspective, however, a protected areas entity located within a significantly larger specialized programme may face extra challenges representing its substantive interests and budget needs as one among many, rather than being answerable directly to the minister. These issues need analysis in the context of local conditions, in order to determine the most effective and efficient institutional arrangement for protected areas functions within the government.

74

Main considerations. Some key considerations are important for the legal drafter to take into account when developing provisions for the lead protected areas agency:

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- (a) It is essential for the legislation to identify, designate or create a protected areas agency that is responsible for implementation of the legislation. This institution should be clearly defined, and should possess the necessary capacity and professional competence.
- (b) Legislation may designate the head or director of this agency to exercise powers and carry out duties. This will normally be the chief executive officer (CEO), in the case of a statutory corporation. It should be clear that this position is directly answerable to the minister or other policy-level official in charge.
- (c) The main functions, duties and powers of the specialized agency or statutory corporation should be indicated with sufficient clarity so that the agency can be held accountable.
- (d) Performance and accountability of the agency and its head should be measured in terms of effectiveness in achieving the objectives of the protected areas legislation.
- (e) In most cases, it is inappropriate to select a government entity or statutory body whose primary responsibilities (for example, industry or commerce) do not directly complement the primary objectives and purposes of protected areas.

4.2.3 Statutory corporations

- 76 Many countries choose to designate an existing statutory corporation or create a new one to serve as the specialized authority for the protected areas system. This places powers and duties for implementing the legislation outside the official government structure. Such an entity is still responsible to the government through the oversight of the minister in charge, or an equivalent body. Statutory corporations (sometimes called parastatals) are typically given a title signifying their responsibility over the protected areas system, such as 'National Parks Trust' or 'National Protected Areas Authority'. A statutory corporation is attractive for its independence and autonomy from the government in decision making, including fund-raising and entering into partnerships with other entities, including non-governmental entities. Its relatively independent status may attract more direct participation from communities, business groups, NGOs and volunteer associations than might be possible or appropriate with a government agency. At the same time, oversight by the minister in charge is necessary to ensure that decisions of the statutory corporation are within its mandate and in furtherance of the objectives and purposes of the protected areas legislation.
- 77 **Creation.** Statutory corporations, by definition, are established by law. Subject to local legal practice, it is desirable to include in the legislation provisions creating the entity or, where one already exists, identifying that entity. Alternatively, if a separate legal instrument is preferred, it should cross-reference the protected areas legislation. In jurisdictions where the legislative practice is to enact separate legislation for individual sites or clusters of sites, a separate statutory corporation may be created for each site or cluster. In such cases, the national protected areas institutional framework may be composed of more than one such entity, each of which is in charge of managing designated sites or clusters of sites.
- 78 **Board of directors.** Organizationally, legislative provisions on statutory corporations normally identify or authorize the creation of a board of directors as the governing body of the corporation. Membership and procedures for decision making are laid out in the law, in a schedule or in subsidiary legislation. The board is answerable to the minister in charge or equivalent high-level official.
- 79 **Membership on the board.** The minister or high-level official is normally responsible for appointing members of the board and approving the selection of the CEO who may be proposed by the board. The CEO of the statutory corporation is normally an ex officio member of the board. Candidates for board membership could be self-nominating or proposed by executive staff of the statutory corporation. Nominations may also be solicited by the minister from amongst the public, or submitted by other government agencies or interests. To ensure that the board has wide and balanced representation reflecting community interests, as well as the appropriate scientific and technical skills, it is advisable to outline in legislation (the body of the principal act, schedules or subsidiary legislation, as appropriate) the main areas to be represented. Representatives to consider include:
- (a) ex officio members (normally one official each from related government sectors such as tourism, forestry, fisheries, water resources and planning);
 - (b) one elected official from each political jurisdiction (province, region, district) covered by that statutory corporation;
 - (c) one or more members from the business community representing different sectors;
 - (d) members from academia or science institutions with relevant scientific and technical expertise (biodiversity conservation, marine sciences, cultural history);
 - (e) environmental NGOs;
 - (f) indigenous and traditional landowners and rightsholders;

- (g) private landowners with conservation interests related to protected areas;
- (h) local communities;
- (i) other relevant interests.

Additional elements. Legislative provisions for the creation or designation of a statutory corporation to manage the protected areas system in accordance with the law should include a number of standard elements and considerations. For instance, the legislation (directly, in a schedule or in a subsidiary instrument) should identify the main functions of the statutory corporation, along with key powers and responsibilities for carrying out these functions. Statutory corporations charged with managing protected area systems generally have functions, duties and powers similar to their counterparts in government agencies. 80

Other provisions applicable to a statutory corporation for protected areas are standard for corporations in general, since the entity is set up legally as a corporation, although answerable to the state. It is common for some of these provisions to be repeated in the protected areas legislation, for certainty and the convenience of the user, even though they are covered in other legislation. The standard attributes of a statutory corporation apply to a protected areas entity, including all the features of a corporation such as perpetual succession, and the power to sue and be sued, acquire, hold, mortgage, lease, sell, dispose of or otherwise deal with land and other property, and make and enter into contracts. In addition, the statutory corporation is liable for the actions of its directors, managers, employees and agents. 81

4.2.4 Management authorities for individual sites

The legislation should address the issue of management authority for individual sites. In some jurisdictions where the system is relatively small and the government structure is centralized, the management authority for all or most individual sites may be the same authority as that responsible for the system overall, whether a government agency or a statutory corporation. In large and complex systems and in decentralized and federal forms of government, however, it is usually necessary to provide at least some sites with their own management authorities. That decision may depend on practical operational issues such as available finances and capacity. It may be feasible for one management entity to be responsible for more than one site, even where the sites are geographically dispersed, if management and enforcement needs are minimal. A large and complex site may require a separate management entity for that site alone. 82

To allow for such possibilities, the protected areas agency with overall responsibility should be given clear legal authority to designate management entities for specific sites, as appropriate. Even where all sites within the protected areas system are managed by the protected areas agency responsible for the system overall, it is advisable to include this provision in the legislation to accommodate future needs as the system changes or grows, or if opportunities arise to include new governance types. 83

Subject to local legal practice, it may be desirable for the legislation to provide that designation of a site management authority will be approved by the minister in charge (or equivalent policy level). This level of approval lends credibility and legitimacy to the designation with respect to other government sectors, local communities and the public at large. The designation should define powers and responsibilities so that the entity can effectively carry out its functions and be held accountable. 84

The site management entity may be a government agency at the national, local or decentralized level. Alternatively, it may be a local community, indigenous or traditional group, NGO, private landowner or 85

other entity by special agreement. Or the site management authority may involve a co-management arrangement with a partnership of two or more entities.

- 86 Governance arrangements may vary from site to site, and over time, spanning a range of possible approaches from the conventional approach where the state owns or controls, and manages, the site to new governance approaches where other entities are in charge (see discussion of new governance approaches in Part II, section 3). With new governance approaches, for example, where voluntarily conserved areas are recognized, it is advisable that the protected areas legislation require the conclusion of management or co-management agreements acceptable to all parties, laying out their respective management powers and responsibilities. This should be a prerequisite for designation or recognition of the area as part of the formal protected areas system. The same requirement should apply where management functions are delegated to other state entities (for example, to a fisheries agency for an MPA or a forestry agency for a forest protected area). The legislation should provide that designated site management authorities have the responsibility to carry out their assigned functions in accordance with the protected areas legislation and its purposes and objectives.
- 87 Consultation with local communities, stakeholders and the public is important when deciding on a site management authority for a protected area on public lands. Such consultations can help build local support, identify possibilities for local involvement and benefit sharing, and provide opportunities to assess the full range of governance options available, including co-management arrangements.
- 88 Where voluntarily conserved areas are concerned, the participation of stakeholders normally proceeds beyond the stage of consultations. Where there is interest among all parties in recognizing a voluntarily conserved area as part of the formal protected areas system, negotiations are required to reach agreement with the local community, indigenous peoples or private entities undertaking the conservation. Negotiations would include arrangements for governance based on the free, prior informed consent of all parties.

4.2.5 Functions, duties and powers

- 89 It is advisable to enumerate in protected areas legislation the main functions, duties and powers of the protected areas agency managing the system overall (whether a government agency or statutory corporation), as well as the general functions, duties and powers of designated site management authorities. In some cases, these may overlap, depending on the structure of institutional arrangements. These provisions in the legislation are particularly important because they set out the legal mandate and authority of the respective entities to carry out their responsibilities and to defend their decisions and actions. They are also critically important for assessing accountability where administrative or judicial review may occur of decisions taken or not taken.
- 90 When working with protected area authorities to develop these elements in the legislation, a number of considerations are important for the legal drafter to keep in mind:
- **Balance detail with flexibility.** The legislation should specify the main powers and duties of protected area authorities while allowing some flexibility to respond to changing operational and administrative conditions.
 - **Powers and duties.** Typically, principal legislation for the protected areas system will contain an umbrella clause stating that the protected areas authority has powers and duties to do what is necessary and reasonable to effectively carry out its functions, whether for the protected areas system or for specific sites, in accordance with the objectives of the legislation. In addition, legislation commonly enumerates the principal powers and duties of the respective authorities. Box III(1)-5

provides examples of the powers and duties of the technical protected areas agency or statutory corporation with overall responsibility under the law for the protected areas system, as well as of site management authorities. Some powers and duties may be delegated by the minister in charge to the lead protected areas authority, or by the lead protected areas authority to specific site managers.

- **Accountability.** The general and specific provisions, taken together, are important for accountability and assessing the overall performance of the entity responsible pursuant to its mandate.

Box III(1)-5: Powers and duties of protected area authorities

Commonly recognized powers and duties of the protected areas authority with overall responsibility for implementing protected areas legislation include the following:

- Prepare, review and update as required the protected areas system plan;
- Recommend new sites or amended sites to be designated, based on scientific analysis and consistent with the protected areas system plan;
- Review, advise on and approve site management plans, subject to ministerial consent;
- Promote expansion or inclusion of new sites through donation, trade or other authorized means;
- Implement relevant obligations under international and regional conventions, and participate in related international and regional forums in furtherance of the legislation;
- Pursue cooperation and consultation at the technical level on all relevant matters affecting or affected by protected areas;
- Negotiate and enter into co-management agreements with other government agencies, public or private entities, communities, indigenous peoples, NGOs or individuals (conclusion of such agreements may require ministerial approval);
- Identify and propose recognition of indigenous peoples' conserved areas, local community conserved areas and PPAs as part of the protected areas system where the areas meet the legal requirements, based on scientific analysis and negotiation of a conservation agreement with the entities concerned (ministerial approval may be required);
- Undertake fund-raising, and administer trust funds;
- Set up sub-committees and other formal and informal arrangements to help carry out responsibilities under the legislation;
- Enter into contractual arrangements;
- Make investments in public infrastructure and other facilities, and services and concessions;
- Provide technical advice and assistance to other public authorities and the private sector;
- Delegate powers and assign duties.

Additional powers and duties of the overall authority or site management entity, as applicable, commonly include the following:

- Prepare, implement and regularly update the management plan for the site;
- Manage the site consistent with the management plan;
- Ensure transparency, public access to information, and meaningful participation of stakeholders and the public in decision making;
- Undertake public education and outreach to build public support and encourage participation;
- Undertake or authorize scientific research, monitoring and adaptive management as necessary to fulfil the conservation objectives of the system or site, as applicable;
- Coordinate activities with other public bodies, professional groups, scientific institutions, NGOs and local communities, as relevant;
- Make expenditures and enter into contracts for the care, supervision, maintenance and protection of the protected area, as appropriate, and for specific services and concessions;
- Employ agents and staff;
- Prepare regular reports to the government and the public, including 'state of the protected areas' reports;
- Prepare and maintain budgets and best practice accounting systems, and prepare annual financial reports for the system or site, as appropriate.

- **Power to remove for non-performance.** The legislation should provide that the minister or protected areas entity responsible for the national protected areas system, as the case may be, has the power to remove a site management entity responsible for a protected area on public lands

for non-performance or malperformance. This decision should be guided in large part by whether the non-performance or malperformance has resulted or is highly likely to result in substantial degradation or irreversible loss of the conservation values for which the site was designated as a protected area. Removal of a voluntarily conserved area from the protected area system should be governed by the terms of the conservation agreement negotiated between the government and the entities responsible for the area (see section 8, below).

- **Powers and duties of staff** below the director or CEO level are normally dealt with in administrative instruments, as part of the decision-making powers of the protected areas authority. Senior appointments may or may not need to be approved by the minister in charge.

4.3 Co-management

91 Co-management provisions are commonly included as core elements of protected areas legislation. Typically, such provisions recognize (and in some cases require) collaboration between government institutions and other technical agencies and advisory bodies on shared concerns or in matters involving overlapping jurisdictions. Today, the legal trend is to recognize multiple actors in active co-management roles with a wide variety of decision-making relationships.

92 The establishment and management of protected area systems has, in recent years, increased the emphasis on partnerships with non-governmental entities, including local communities, indigenous and traditional peoples, NGOs, for-profit organizations, and private individuals. In principle, these entities have always been potential partners for co-management arrangements in state-owned or state-controlled protected areas. The new element increasingly being encouraged in international guidance is to use co-management as a governance arrangement to build partnerships with communities and other entities already managing their lands as conserved areas. The goal is to develop a governance arrangement involving shared decision making that is beneficial to the landholder and meets the legal requirements for the area to be included in the formal protected areas system.

93 Co-management arrangements with communities and private entities managing their lands for conservation provide a significant opportunity to expand the coverage and effectiveness of protected area systems nationally, and in the process to advance global biodiversity and protected areas goals. Legal frameworks need to be supportive and clear about the options available as well as the rights and responsibilities of all partners.

94 **General considerations.** To effectively use co-management institutional arrangements as a governance type within the national protected areas system, a number of considerations for protected areas legislation are relevant. These include:

- **Definition.** There is no agreed international definition of co-management in its broadened role. A definition is not necessary to effectively apply the concept as long as substantive provisions indicate the full scope of possible arrangements. The legal drafter may want to review the IUCN definition of 'co-managed protected areas' as noted in section 2.1.2, above.
- **Authority.** A provision is normally needed giving authority to the minister in charge or protected areas agency or authority, as the case may be, to enter into a co-management agreement with other public authorities, NGOs, local communities, indigenous and traditional peoples, and private landowners. This agreement could apply to a government protected area or a voluntarily conserved area, and would normally provide for preparation and implementation of a plan of management for the area.

- **Consistency.** The legislation should provide that any co-management agreement must be consistent with other provisions of the legislation.
- **Protected area status.** It should be clear in the protected areas legislation that a prerequisite for a co-managed area to be recognized as part of the formal protected areas system is that the site involved must satisfy the definition of a protected area.
- **Mutual agreement.** A provision should be included to indicate that the co-management agreement may be on such terms as are agreed by all parties as long as the terms are consistent with and in furtherance of the objectives of the legislation. Co-management agreements normally involve a negotiation process that is transparent and participatory, with a formal agreement being concluded based on the free, prior informed consent of all parties. A co-management agreement should cover all significant aspects of the arrangement as required by the legislation, as well as further elements agreed by all parties.
- **Agreed arrangements in writing.** The legislation should require that the co-management agreement be in writing and that the agreement specify, as a minimum, services, management and other arrangements that have been agreed, any conditions or payments under the agreement, and the period of time for which the agreement is to have effect.

Further guidance on content. Some jurisdictions may want to provide additional guidance through principal legislation or a subsidiary instrument on the standard content of co-management agreements, to help promote effectiveness and consistency. Co-management agreements commonly contain the following elements:

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- (a) parties to the agreement (legal identity);
- (b) legal description of the area;
- (c) conservation objectives of the area;
- (d) provisions for the preparation of a management plan;
- (e) rights and obligations of each party with respect to the area's governance and management;
- (f) specifications about the use of buildings, equipment or other property provided as part of the agreement;
- (g) estimate of reasonable costs associated with implementation of the management plan, and who will pay;
- (h) well-defined benefits and incentives to flow from the agreement, and a benefit-sharing plan that is fair and equitable;
- (i) financial and other reporting requirements;
- (j) indicators for measuring performance effectiveness on the ground;
- (k) process to remedy breach of the agreement;
- (l) dispute resolution and arbitration; and
- (m) duration of the agreement.

Special considerations for voluntarily conserved areas. In addition to the above considerations, other factors are important for the legal drafter to keep in mind where voluntarily conserved areas may be involved. They include:

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- (a) Implementation of co-management agreements with local communities, indigenous and traditional peoples, and private landowners may require technical support and capacity building. These elements may need to be part of the preparatory phase of co-management, and should be offered by government authorities without imposing undue conditions upon the powers and authority of the local groups or individuals involved.

- (b) In some cases, co-management arrangements involving local communities, indigenous and traditional peoples, or private landowners could be a stepping stone to sole management. Similarly, institutional arrangements that begin as sole management may later be converted to co-management due to changed circumstances. Agreements should have some flexibility to accommodate such changes.
- (c) It is worth emphasizing that rights and responsibilities laid out in a co-management agreement must be identified in a manner and form understandable to the participating landowners or rightsholders. Rights and responsibilities with respect to a voluntarily conserved area should be tied to compliance with a management plan appropriate for that governance type (discussed further in section 7.4, below). As relevant, the management plan may cover rights and responsibilities related to such activities as the conservation and sustainable use of certain biological resources; access, occupation and development activities; capacity building and technical support; scientific research, monitoring and data collection; education and training; restoration activities; finances; and periodic reporting.
- (d) Agreements executed by representatives on behalf of indigenous and local communities must be based on the free, prior informed consent of the community members involved.
- (e) Where customary or traditional rights may be unclear, an important element of negotiations will be to clarify and firmly establish, where needed, the legal basis for land and resource use rights, and to regularize those rights by recognition in the agreement and in government legal records. Otherwise, indigenous and local communities are likely to face difficulties implementing co-management arrangements as they attempt to carry out management actions and enforcement, especially when trying to enforce rules against outsiders and other government sectors.

4.4 Advisory bodies

- 97 It is advisable for protected areas legislation to provide authority for the establishment of advisory bodies for scientific and other matters, on an ongoing or issue-specific basis. Depending on the jurisdiction, these bodies may be called advisory boards, councils or committees. They may be established at any jurisdictional level (national, provincial, site), for any issue (including cross-jurisdictional coordination), and for any governance arrangement. Typically, the role of advisory bodies is to offer recommendations and advice to the protected areas authority which the latter may use in decision making. The advisory body, by definition, does not have power to override a decision of a protected areas authority. A number of considerations are important for the legal drafter to keep in mind when preparing legislative provisions on advisory bodies:
- 98 **Approaches.** Protected areas legislation may recognize or authorize advisory bodies in different ways, depending on local needs and preferences. These include:
- (a) a general provision in the legislation authorizing the creation of permanent or temporary advisory committees as may be necessary or useful from time to time in furtherance of the legislation;
 - (b) establishing a specific advisory committee within the legislation as a permanent advisory committee (in some jurisdictions, called a standing committee), such as a scientific advisory committee, and identifying membership and general functions; or
 - (c) a combination of the above.
- 99 **Purposes.** The legislation should indicate the general purposes of the advisory bodies created, recognized or authorized. As appropriate, the legislation may include more specific provisions in the case of advisory bodies intended to serve special purposes, for example, providing scientific advice,

carrying out community outreach and education, or providing other community services in relation to protected areas. Broadly speaking, advisory bodies may have a variety of purposes which may be served jointly or separately by different bodies, including:

- (a) providing technical or scientific advice, including research and monitoring, relevant to the management of the protected areas system or a specific site;
- (b) providing an easily accessible channel for dialogue, interaction and involvement of the public, special interests or groups, and specific stakeholders, on the initiative of the members or the authority, on an issue-specific basis or generally;
- (c) providing representation and expertise from a broad range of interests and stakeholders, including local communities, indigenous peoples and the private sector;
- (d) serving as a mechanism for broad or specialized participation and information exchange. It should be stressed, however, that this mechanism is not a substitute for the responsibility of protected area authorities to apply good governance principles to their decision-making processes as laid out in the legislation, including ensuring information access and meaningful public participation.

Membership. The composition of advisory bodies is normally guided by their assigned functions. A general statement to this effect may be included in the legislation. If the function is primarily to provide advice on a particular protected area, it is important to include local expertise and, possibly, local leaders. Affected or interested indigenous and local communities, private landowners, and other stakeholders may be represented. In some cases, recognized experts from outside the country or the jurisdiction may be worthwhile to include as well. Non-governmental representatives dedicated to such special interest groups as conservation or other relevant purposes might also be included. Generally, it is advisable to include scientific expertise on any advisory body to ensure scientific input for deliberations concerning protected areas management and conservation, and to facilitate science-based decision making.

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Outputs. Advisory bodies may, as appropriate, offer several services, such as:

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- (a) suggestions and consultation regarding amendments to the basic law and the drafting of regulations under the legislation;
- (b) input for the preparation of management plans and the review, amendment and implementation of existing plans, including technical drafts;
- (c) advice and consultation, either by request or on its own motion, to the protected areas authority on matters related to the operation of the legislation, including advice related to a particular protected area or areas that should be declared protected.

Independence. Advisory body members should be independent with respect to the specific subject matter under consideration and the recommendations they provide. Where there is a potential conflict of interest on an issue, the advisory body member should be required to indicate the potential conflict and refrain from participation where other members so advise, or where the member so chooses on their own initiative.

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4.5 Coordination mechanisms

Protected areas legislation should reflect the need for protected area authorities to coordinate across sectors and jurisdictions. A legislative provision on coordination could indicate the kinds of purposes that may be served. These include coordinating policies, programmes and procedures across departments, ministries or levels of government; collaborating on programmes; sharing expertise, facilities, equipment and common costs; and undertaking joint projects, including preparing joint reports.

103

- 104 A general provision on coordination and consultation should be included in protected areas legislation and should also be listed in the powers and duties of protected area authorities. Such a provision could specify the responsibility of the protected areas agency (whether the government or a statutory corporation) to coordinate and consult on general and specific matters on an ongoing basis through formal and informal means with all relevant government sectors and levels. Local management authorities assigned to specific protected areas should also be required to coordinate and consult with other local government entities as needed to carry out their functions.
- 105 **General aspects to consider.** There are several aspects of coordination to keep in mind when drafting provisions for protected areas legislation. The first consideration for the legal drafter working with protected area authorities is to identify those priority areas where coordination may be needed. Such areas normally include:
- (a) coordination at the policy level (particularly for overall national policy development, land use planning and development, and finance);
 - (b) coordination across sectors at the technical level (sometimes called horizontal coordination);
 - (c) coordination across levels of government (sometimes called vertical coordination); and
 - (d) coordination within and between governments with respect to shared resources and ecosystems, and TBPA.
- 106 Legislation should also include a general provision on the need for protected area authorities to coordinate and consult across government levels and sectors on matters affecting and affected by protected areas. Such a statement may identify the various levels and sectors where coordination is most important, as appropriate. Depending on local legal practice, the legislation could include a requirement for coordination in general or specific terms, for example:
- (a) A general provision requiring ongoing coordination and consultation between protected area authorities and other named ministries or departments at appropriate jurisdictional levels with respect to:
 - protected areas and biodiversity matters, including sites established under other legislation (for example, laws on forestry, fisheries, water, indigenous and traditional peoples, planning); and
 - other sectors of activity which may have a positive or negative impact on protected areas and biodiversity conservation (for example, land use planning, transportation, agriculture, industrial development, energy, mining, tourism).
 - (b) A general provision calling upon decision-making institutions with responsibilities in other sectors of activity which may impact protected areas to regularly consult and coordinate with the appropriate protected area authorities in advance of decisions that may affect in any way the protected areas system or a specific site.
- 107 In addition to a general or specific duty to coordinate and consult, the legislation may identify an existing mechanism or create a new mechanism for protected area authorities to use for coordination specifically on protected area matters. Normally this would be chaired by a protected areas representative and convened as needed or on a regular basis. Provisions in the law or in a subsidiary instrument, as appropriate, could indicate the main functions and key members of an existing or new mechanism identified for protected areas coordination purposes.
- 108 The legislation or subsidiary instrument may also specify other coordinating mechanisms in which the protected area authorities or their interests are already represented, for example, intra-governmental sustainable development, budgetary or international outreach committees.

Coordination to resolve overlap and conflicts. Coordination mechanisms within the government play a valuable role in helping to identify and resolve conflicting, unclear or overlapping mandates across sectors or levels of government. Where a specific conflict has arisen between government entities on a particular issue, however, coordination mechanisms by themselves may not be appropriate or sufficient to ensure resolution. In many jurisdictions, specific conflicts are addressed through intra-governmental consultations and negotiations between the concerned technical departments and, as needed, the respective ministers as part of their normal responsibilities as government officials. This role of the government would also apply to statutory corporations. For example, if a statutory corporation responsible for protected areas were to make a decision contrary to the legislation, this would be a matter in most jurisdictions to be resolved ultimately by the minister in charge. In some jurisdictions with active civil society groups, the contested decision may be raised as a matter of public interest and may eventually come under administrative or judicial review.

109

Box III(1)-6: Intra-governmental conflict resolution procedures in South Africa

The South African Government in 1998 enacted an intra-governmental conflict resolution procedure under its framework environmental law, the National Environmental Management Act 1998. This measure was taken in an effort to remedy the growing fragmentation of South Africa's environmental law and institutional regime.

South Africa has numerous laws administered by several government agencies with competing mandates. The country's protected areas legal framework comprises approximately 11 national laws, 5 provincial Acts and 3 provincial Ordinances providing for the designation of over 25 different types of protected areas administered by a number of national departments, provincial departments, local authorities, statutory authorities and private landowners.

The Act contains a chapter entitled 'Fair decision-making and conflict management'. Its provisions authorize any national minister, provincial minister or local authority to refer a dispute to conciliation or arbitration where a difference or disagreement arises with fellow authorities concerning the exercise of their functions which may significantly affect the environment. The person facilitating the conciliation or arbitration may be appointed from within the government or from an independent panel of experts. The referral of a dispute to conciliation or arbitration is discretionary.

The purpose of these provisions is to establish a mechanism to achieve cooperative environmental governance, and to remedy conflicts arising between authorities administering the protected areas regime and other government authorities (principally mining, agriculture, forestry and land use planning). In practice, use of the mechanism has been limited to date. For instance, the mechanism has not been activated in recent years to resolve conflicts between mining and environmental authorities over issues of environmental protection. This suggests that, as a political matter, ministries may wish to use more informal and internal means to resolve conflicts rather than trigger official mechanisms, or that the conflicts have continued to persist unresolved.

Contributed by Alexander Paterson; see also Paterson, 2010.

Some jurisdictions have gone beyond standard coordination mechanisms and government operational processes to resolve internal conflicts. For example, South Africa has established procedures for intra-governmental conflict resolution specifically on environmental and protected area matters (see Box III(1)-6).

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4.6 Special considerations for voluntarily conserved areas

Modern protected areas legislation should provide the authority and framework for the government to recognize a broad array of institutional arrangements for protected areas governance. This should include recognition of governance arrangements already in place for conserved areas owned or controlled by indigenous or local communities, or private owners. Protected area legal frameworks should recognize and support these non-state entities in managing or co-managing their land or sea areas as protected areas.

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- 112 In addition, subject to local practice, legislative provisions could elaborate on the kind of assistance the protected areas authority should provide to support communities and individuals in managing their conserved lands as part of the protected areas system. This assistance may include:
- (a) providing technical assistance, education and other support to indigenous peoples, local communities and private entities to strengthen management of their voluntary conservation initiatives;
 - (b) providing guidance and assistance to such entities to understand and, if needed, to fulfil the requirements for inclusion of their voluntarily conserved areas in the national protected areas system;
 - (c) assisting entities that have interest in including their voluntarily conserved areas in the national protected areas system to understand the need for conservation, co-management and other agreements, and helping to negotiate such agreements;
 - (d) helping such entities, where they so desire, to qualify for and take full advantage of technical assistance, funding support, professional services, and other benefits and incentives available to support their conservation efforts;
 - (e) assisting with the promotion of voluntarily conserved areas that are recognized as part of the formal protected areas system for any revenue-generating uses, including ecotourism, that are part of the management plan and consistent with the conservation objectives of the area;
 - (f) appointing representatives of indigenous and community conserved areas (ICCAs) and PPAs to advisory committees, commissions and other special bodies associated with the protected areas system to promote collaboration, identify opportunities to strengthen the system or specific sites, and share experience, concerns and traditional knowledge.

5 Planning for protected areas

- 113 In identifying a site for inclusion in the protected areas system, the initial consideration is the overall needs of the system. This involves attention to the system plan as well as the broader landscape and seascape within which the site is located, including land use and marine spatial planning. The discussion below reviews legal considerations associated with the protected areas system plan, broader considerations associated with the legal status of proposed areas, compatibility issues with surrounding landscapes and seascapes, and the important contribution of good land use planning and regulation in general.

5.1 System plans

- 114 It is important to think of individual protected areas as part of an overall protected areas system. Protected areas system planning is a fundamental best practice management principle. Protected areas legislation should provide for a system planning approach to the selection, establishment and management of individual protected areas. It should also provide for the protected areas system to recognize and include conserved areas established or recognized under legislation other than the protected areas legislation. A system approach is operationalized through a protected areas system plan.
- 115 Protected area legal frameworks should call for a protected areas system plan, define its core purposes, and enumerate requirements concerning its preparation and content.

Purpose. The primary purpose of a system plan is to identify priority conservation goals and objectives for the system overall, taking into account the ecosystem approach, serious existing and potential threats including from IAS, values that may be irreplaceable, needs for adaptive management, and how existing and proposed sites, including sites established under other legislation, fit within the system. The goal is to achieve a comprehensive network of coherent, representative, adequate and interconnected protected areas. 116

Additional elements that may be included in the legislation to elaborate this purpose are as follows: 117

- (a) provide strategic direction for existing protected areas as part of a system;
- (b) identify connectivity needs and gaps in coverage;
- (c) incorporate in the design of the system and the selection of sites adaptive management needs that may arise from time to time;
- (d) using the best available scientific data, assess the adequacy of existing protected area boundaries and the need for new or expanded areas, to ensure preservation of the conservation values of the system with a changing climate;
- (e) identify opportunities to expand and strengthen the system through the inclusion of voluntarily conserved areas and new governance arrangements as long as consistent with the objectives of the legislation.

Scope and operation. Legal provisions on the scope and operation of the system plan could: 118

- (a) Provide a statement that the protected areas established under the legislation comprise the protected areas system, and that conserved areas established or recognized under other relevant legislation may also be part of the system as long as consistent with the objectives of the legislation and the formal protected areas system.
- (b) Identify the entities responsible for preparing and maintaining the system plan. Normally this is the lead protected areas agency responsible for the system overall. Depending on the jurisdiction, the system plan may require approval by the minister in charge, and may also need to be laid before the parliament or legislature for information.
- (c) Require that the protected areas system plan is designed and maintained in accordance with the ecosystem approach (including considerations for ecological networks and connectivity conservation across landscapes and seascapes), using the best available scientific information, coordinating with other sectors and levels of government, and ensuring meaningful community and stakeholder participation.
- (d) List the main elements of a protected areas system plan, particularly the contribution of individual existing or proposed sites to the conservation and associated objectives of the system, as well as gaps in coverage and the order of priority for attention, taking into account the conservation value of sites, imminent and serious threats, and feasibility.
- (e) Identify criteria for adding new protected areas to the system from time to time, to maintain and strengthen the system, including the following:
 - **representativeness and adequacy** of a site for advancing the comprehensiveness of the system and supporting its goals and objectives, including to maintain ecological processes, biological diversity, or important natural and cultural heritage features such as landform types, landscapes and historic sites;
 - **persistence to survive** over the long term in the face of anticipated climate change and other global and local changes, by maintaining ecological processes and viable populations of species;

- **compliance with international treaty obligations**, and commitments under international and regional programmes, including those related to biodiversity conservation, protected areas for specific ecosystems or migratory species, and world heritage sites;
- **compliance with good governance principles and human rights** as laid out in the relevant international instruments.

5.2 Legal status of land or sea

- 119 An initial step when proposing a site to be established or designated as a protected area is to determine the legal status of the land or sea area involved and assess whether it comes within the scope of the protected areas legislation. It is important for protected areas legislation to be clear about its jurisdiction with respect to the legal status of land or sea areas that may be considered for inclusion in the protected areas system, in order to avoid uncertainty or legal challenges later on. To take into account the possibility of new governance approaches, provisions should indicate that such areas may be public, private, communal or common property. In some cases, the jurisdiction to which the protected areas legislation applies may also be defined by cross reference to other legislation. This may be the case with marine areas, for example, where other legislation already exists defining marine zones such as the territorial sea or EEZ, and in federal states, defining coastal state waters as compared to federal waters.
- 120 Public lands and marine areas under national jurisdiction are the foundation of the protected areas system. The least complicated legal transaction for establishing a protected area is where the site exists on public land or in marine waters already under the jurisdiction of the protected areas authority.
- 121 Another relatively uncomplicated situation is when the proposed site is situated on public land under the jurisdiction of another government entity. Negotiations will be needed to transfer responsibility and associated budgetary resources to the protected areas authority. But where there is policy support, this should be a relatively straightforward administrative matter, especially when both entities are within the same ministry (for example, state-owned or state-controlled forest lands managed by a government forest department or national forest corporation under the same ministry as that responsible for protected areas). With respect to marine areas, a similar situation may exist for proposed marine sites that are under the jurisdiction of another entity, such as a fisheries department or coastal conservation agency. Where different ministries are involved, as opposed to entities within the same ministry, the arrangement for transfer may entail additional negotiations and requirements because of multiple and diverse ministerial interests and authorities affected. Again, such a transfer should nevertheless be able to proceed relatively smoothly as long as there is high-level policy support. In either case, management or co-management agreements will be important to conclude between the entities involved to most effectively mobilize all knowledge, skills and resources.
- 122 Other situations related to the legal status of proposed sites may be more complicated. For example, a proposed site may contain a combination of tenure rights even on state-owned land. While the land may be owned by the state, resource use rights based on customary law, statute, lease or other contract may exist. A marine area under national jurisdiction may also involve traditional use rights, for example, where indigenous peoples or local communities have dedicated fishing grounds. In other cases, the proposed site may be primarily state-owned but intermingled with private property, or with scattered human settlements held collectively where communities have traditionally been allowed to use the land even though title is with the state. Or the site may be entirely privately owned by a

corporation, individual or NGO. Finally, the site may be under community or group management as a common property resource, where the community or group has communal ownership recognized under statutory or customary law or has traditionally used the area even though ownership or use rights have not been legally recognized, in which case the legal status needs to be resolved.

Once the legal status of a proposed site is clear with respect to title and tenure rights, the protected areas authority has a number of options to bring those parts of the proposed site not owned or controlled by the state into the formal protected areas system. These include the following:

123

- (a) Acquire the non-state land by purchase or donation with the title being transferred to the government, where legally permitted.
- (b) Negotiate an agreement with the communal or private landowner whereby the landowner dedicates the land to conservation through a prescriptive easement attached to the land, with oversight by the protected areas authority or a designated entity on its behalf. The owner retains title and may receive compensation where use rights are diminished, or may receive incentives to make the easement an attractive option.
- (c) Recognize private or communal lands already managed as voluntarily conserved areas or identified for their potential as voluntarily conserved areas to be part of the formal protected areas system, either as a separate protected area or as part of a mixed protected area with both state and non-state lands. This option is possible as long as certain conditions are met, including that the non-state entities hold legal title to the land or resources.

Box III(1)-7: Property rights and interests, and legal tools available for conservation

Who may hold legally recognized property rights: Any legal entity, for example, the state, a statutory corporation, private individual, corporation (for-profit or not-for-profit), foundation or trust, as well as registered associations, societies or charities, legally recognized indigenous or traditional peoples, and legally recognized local communities.

Kinds of property rights that may be held:

- (a) Ownership—
 - Government: state lands or crown lands, other lands or marine areas controlled by the state;
 - Statutory corporation: lands or marine areas owned or controlled for public purposes that are within the scope of the mandate of the corporation;
 - Non-state: lands or waters held under fee simple by an individual, corporation or NGO, or lands or waters held collectively by a community and recognized as such under customary or statutory law.
- (b) Property rights other than ownership—
 - Long-term or short-term lease;
 - Easement or covenant (time-bound or perpetual);
 - Customary use rights recognized as such in the legal system.

Rights over property not amounting to property rights:

- (a) Licences, permits, contracts;
- (b) Other interests held informally or through customary use.

Legal tools available for conservation (by voluntary action or action of the state):

- (a) Covenants: running with the land or resources, affirmative or negative covenant;
- (b) Easements and legal servitudes creating an encumbrance on the land restricting certain uses in favour of conservation (in some jurisdictions, called a conservation easement);
- (c) Traditional rights to practise sustainable use recognized under statutory or customary law;
- (d) Land use planning and environmental protection laws and regulations, including environmental and social impact assessment laws and regulations;
- (e) Right of property owner or rightsholder to veto certain destructive uses of the property by withholding free, prior informed consent.

- (d) Negotiate an arrangement whereby responsibility for the management of land or sea areas traditionally used by the community concerned may be signed over or leased to the government agency, while the community retains its traditional use rights over such areas for the long term.
- (e) Where the legislation so provides, use powers permitting the designation of non-state lands as protected areas without acquisition. This may be done with or without compensation, as prescribed. Compensation is usually linked to whether current use of the land may continue (no compensation) or whether use will be substantially restricted (compensation).
- (f) Acquire the land through the compulsory acquisition process, in accordance with land acquisition legislation and associated rules for compensation. However, this tool is politically unpopular and is rarely used, particularly for conservation.
- (g) A combination of the above, particularly where the proposed site is large, with complex or multiple tenure rights.

124 There is another option for the lead protected areas agency to consider once the status of the land or sea area has been determined. This option is to forgo nomination as a protected area, even though the site may have high conservation value, because tenure issues are too complex to be resolved in the time frame and with the resources available. Forgoing nomination may also be considered when, for example, the market value of the site is too high to make purchase a viable option.

125 Under circumstances where inclusion of the site in the formal protected area system is not an option, preservation of the site's important conservation values may have to rely on other land use and environmental protection mechanisms, including laws, regulations and plans administered by other agencies. Land use and environmental laws and regulations may provide authority to restrict certain property and resource use rights when important public interests are at stake, for example, public health and safety, the protection of essential ecosystems (such as watersheds), or other important conservation values (such as endangered species). The protected areas authority has responsibilities here as well. It should consult and coordinate with other government entities, indigenous and local communities, and private parties with interests or activities on the site. The protected areas authority also should provide complete information about the site's important conservation values. In addition, the protected areas authority has a critical role in helping identify other means, such as land use planning mechanisms and EIA, that may help maintain the conservation values of the site.

126 Box III(1)-7 shows the variety of possibilities for ownership and tenure, along with the kinds of tools that may be available to preserve high-value conservation areas or resources, either as part of the formal protected areas system or outside the system, for example, as buffers or corridors.

5.3 Compatibility with surrounding landscape or seascape

127 The design and establishment of protected areas should also take into account the broader landscape or seascape. Today, there is growing scientific consensus that protected areas must be designed and managed in the context of the ecosystem approach, including considerations of ecological connectivity, keeping in mind the larger landscapes and seascapes of which they are a part. Evidence is overwhelming that protected areas cannot survive as isolated islands and that planning requires a large-scale perspective covering entire ecosystems, bioregions, and ecologically functioning landscapes and seascapes.

128 Specifically, legislative provisions on protected area design and establishment should promote compatibility of the protected area and surrounding landscapes or seascapes. For this purpose, the

legal drafter should incorporate supportive principles and requirements in protected areas legislation, including:

- (a) The establishment of protected areas should be in keeping with the ecosystem approach. The selection of proposed sites should take into account, to the extent possible, surrounding landscapes and seascapes, the need for buffer zones and ecological corridors, and other connectivity considerations.
- (b) During the design of a protected area, identification should be made of special habitats or habitat types that may need protection outside the formal protected areas system in order to support the objectives of the protected areas system and the site (for example, wetlands, tidal areas, watercourses). Provisions should call for protected area authorities to work with land use planning authorities to give such habitats special protection either through land use clauses, or marine spatial planning and zoning clauses in the protected areas legislation, or through general planning legislation.

Box III(1)-8: General protection of special habitat types or zones in Denmark

Denmark's Nature Protection Act 1992, as amended, may be used to establish individual protected areas. However, in a country with little remaining natural land, the Act has a valuable role that goes much beyond this function. It includes clauses to ensure the general protection of certain habitat types and zones throughout the country. These habitat types and zones are protected in their own right, without compensation if the areas are privately owned. The specific habitat types and zones being protected are identified as follows:

Protected habitat types. The Act prohibits any activity that may alter their natural state. The exception is with a permit which may only be granted in special circumstances. The following habitat types are completely protected:

- (a) designated watercourses (totalling approximately 30,000 km in length);
- (b) natural lakes of more than 100 sq m;
- (c) the following when they cover more than 2,500 sq m taken separately, jointly or in connection with lakes:
 - heaths, bogs, moors, salt marches, swamps and coastal meadows;
 - humid permanent grasslands and uncultivated dry meadows.

Lakes, bogs and moors are also protected in urban zones and summer cottage areas, while the other habitat types are only protected in rural zones.

Protected habitat types cover approximately 9.4 per cent of the land surface, and are registered and shown on official government maps.

Protected zones

- (a) Beaches and other stretches of coast located within 300 m of the beginning of continuous land vegetation are—
 - strictly protected, in the same manner as habitat types; it is prohibited to alter their state without a permit which may only be granted in special circumstances (they cover approximately 3.5 per cent of the land surface).
- (b) Similar protection zone of 100 m around 'fixed ancient monuments' (approximately 20,000 are protected per se).
- (c) Zones of 150 m around lakes with a surface area of at least 3 hectares and along watercourses with a bottom width of no less than 2 m where, however, it is only prohibited to build, alter the surface and carry out plantation.

Protected forest buffers. There are building control zones within 300 m of forests.

Source: Consolidated Act No. 749 of 21 June 2007, as last amended by Act No. 514 of 12 June 2009.

- (c) The critical role of compatible planning of surrounding landscapes and seascapes should be recognized for building the natural resilience of protected area systems to sustain their functions in biodiversity conservation and ecosystem maintenance in the face of global change, including climate change.

- (d) Among the duties of protected area authorities should be the duty for ongoing consultation and collaboration with other government entities responsible for resource management (for example, forestry, fisheries, water), land use planning and development (for example, tourism, transportation, housing, energy) to promote compatible activities in the surrounding landscapes or seascapes and in special habitats.
- (e) Protected area authorities should be encouraged to promote voluntarily conserved areas in surrounding landscapes and seascapes in order to extend the formal protected areas system or provide compatible uses as buffers and connectivity conservation areas, and to build relationships with indigenous and local community groups and private landowners for this purpose.

129 Many countries incorporate in their protected areas legislation provisions to extend protection beyond the formal protected areas system. Generally, a main purpose of this extension is to provide some scope within the legislation for protected area authorities to protect the integrity of the system and specific sites. For instance, the National Integrated Protected Areas System (NIPAS) Act 1992 of the Philippines empowers the Secretary of the Department of Environment and Natural Resources, the lead protected areas agency, to adopt and enforce a land use scheme and zoning plan in areas adjoining protected areas to control activities that may threaten the ecological balance in protected areas (NIPAS Act, s. 10). Rules under the Act, revised and updated in 2008, also include an explicit policy to encourage biodiversity corridors linking major protected areas (DENR Administrative Order No. 2008-26, Revised Implementation Rules and Regulations of the Act. No. 7586, 24 December 2008). (See the Philippines case study accompanying these guidelines: La Viña et al., 2010.)

130 Box III(1)-8 provides an example from a Western European country, Denmark, of nature protection legislation with distinct land use clauses that extend into the broader landscape to protect specific habitats through defined prohibitions and restrictions. This type of legislation is not unique to Denmark and can be found in similar form in many other countries, especially in Western Europe.

5.4 Supportive land use regulation

131 As a planning principle, protected areas planning should be integrated into existing and proposed land use plans. In general, a country's land use legislation should complement and reinforce its protected areas legislation and play a central role in supporting conservation goals where lands may have high conservation value but be unavailable for protected area designation.

132 Most countries of the world have some basic legislation on land use to protect public health, safety and general welfare. Historically, critical sites for ecosystem services (such as water sources and waterways) have received some protection through land use regulations to safeguard and maintain these essential services. Zoning and building codes are also common land use tools, employed to separate one set of land uses from another. In many countries, land use planning is a tool to help guide growth and development. Agenda 21 resulting from the United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro in 1992, gave land use planning a key role as part of natural resource management and sustainable development (UN, 1992).

133 Land use laws and land use planning systems vary from country to country. For many countries the bulk of land use regulation and enforcement is directed to urban and suburban areas, with the use of zoning codes for residential, commercial and industrial development along with building codes to regulate building height, lot coverage and other features. In some countries land use planning has evolved into nationwide planning systems that guide future use of all land, including rural land. The scope of national land use planning may be limited to key sectors or be inclusive of all sectors at

stake, from those related to production (for example, agriculture, forestry) to other functions that the land needs to serve (for example, protected areas, recreation, road-building, waste disposal sites and landfills, restricted use areas such as water recharge areas, and areas serving essential ecosystem functions such as wetlands and estuaries).

Box III(1)-9: French land use planning and nature protection

National planning framework. In 1999, France enacted a new national land use planning law, the Voynet Act 1999 (Law 99-533 of 25 June 1999), replacing the single planning scheme in place since 1995 with nine planning schemes, including one for 'natural and rural areas'. A plan for this scheme was adopted by decree in 2002 (Decree 2002-560 of 18 April 2002). Among other things, it called for the establishment of corridors and the extension of protected areas in order to protect biodiversity, and for the establishment by 2020 of a nationwide ecological network in furtherance of the requirements and principles of the European ecological frameworks (see discussion of the European ecological frameworks in Part IV, section 4.6).

This national planning mandate is implemented through separate regional plans for the country's 22 regions, as well as two levels of legally binding local plans: local municipal plans (*Plan local d'Urbanisme*) required of each French municipality (*commune*), the lowest-level administrative division in France; and master plans (*Schéma Directeur*, since 2000 called *Schéma de Cohérence Territoriale*) prepared by groups of associated municipalities (*intercommunalités*).

Master plans and local municipal plans are governed by the Land Use Planning Code (*Code de l'Urbanisme*, 1973). Master plans identify the location of natural, agricultural and urban areas to be protected (Art. L. 122-1), and local plans must conform with their corresponding master plan. The Land Use Planning Code gives municipal authorities the power to identify and protect sites, sectors and landscape elements for ecological purposes (Art. L. 123-1, para. 7). They may declare woods, forests or parks as classified wooded areas (*espace boisé classé*) (Art. L. 130-1), which results in the prohibition of any land use likely to affect their conservation.

In 2007, a national conference on the environment (called '*Grenelle de l'environnement*' for its meeting place in Paris) was convened with representatives from the national government, local authorities, trade unions, employers' unions and environmental NGOs. Among its recommendations for new actions in support of sustainable development was the creation of national green (for land) and blue (for water) belts to be in place by 2012, composed of natural areas important for the preservation of biodiversity (protected areas), and ecological corridors comprised of natural and semi-natural areas linking protected areas (Programmatic Law No 2009-967 of 3 August 2009, also known as Law Grenelle I).

Law Grenelle II was enacted in 2010. Its Article 121 provides for the elaboration of "National Orientation Principles for the preservation and restoration of ecological connectivity" (*Orientations nationales pour la préservation et la remise en bon état des continuités écologiques*), to be adopted by decree (presumably by the end of 2010). These principles will apply to national planning and projects, including major transportation infrastructure. Regional ecological master plans will be required to respect these national principles when mapping green and blue belts, and the corresponding master plans and local plans will be required to include them among their ecological connectivity objectives.

The municipality of Saint-Martin d'Uriage. The municipality of Saint-Martin d'Uriage provides an example of how existing nature protection measures in land use laws are being implemented. Saint-Martin d'Uriage is a rural alpine municipality located near the city of Grenoble, with about 5,000 inhabitants and territory of about 3,500 hectares, one third of which is forest. The *intercommunalité* of which Saint-Martin d'Uriage is a part has a master plan providing that connectivity must be re-established between habitats fragmented by urbanization and major infrastructure. This includes the restoration of natural wooded corridors and the preservation of open spaces along watercourses. To that end, the master plan provides that each local plan must have a natural and wooded zone along either side of watercourses (Land Use Planning Code, Art. R. 123-8).

Since 2004, Saint-Martin d'Uriage's local plan and maps have included ecological corridors vital for the connectivity of natural areas, classifying them as 'natural and wooded zones', which gives them special protection. The authorities have also established a subcategory within the natural and wooded zone for ecological corridors, and adopted special rules, for example, prohibiting roads in these areas where they may cause significant disturbance. Roads that are permitted must have border hedges with native and diversified plant species. Public and private fences must allow free movement of wildlife, and outdoor public and private lighting must direct beams towards the ground to minimize disturbance to wildlife.

Contributed by Simon Jolivet; see also the France case study accompanying these guidelines: Guignier and Prieur, 2010.

It has been recognized over time that environmental protection and natural resource conservation (including but not limited to protected areas) is an important aspect of national planning. Land use

legislation has evolved to permit planning mechanisms conducive to environmental protection, including controls over activities in environmentally sensitive areas, thereby also supporting the protected areas system. The result is that these expanded land use controls have directly benefited the formal protected areas system by supporting individual protected areas with buffers and corridors and safeguarding ecosystem functions on which protected areas depend.

- 135 Western Europe is a region where many countries have adopted national land use plans covering all sectors. These plans are legally binding on all lands, including private lands, in order to advance the public good by protecting the environment, human health and safety. In some countries, national land use planning has developed to operate at different planning levels. France provides an example of a multi-level land use planning framework that includes legal protection for important natural areas and resources outside the formal protected areas system and in support of the protected areas system (see Box III(1)-9; see also the France case study accompanying these guidelines: Guignier and Prieur, 2010).
- 136 Even with strong land use planning laws supporting nature conservation, it is important for the legal drafter working with protected area authorities to keep in mind that land use zoning is not a substitute for protected areas legislation. Where a site has unique natural values needing strict protection, the most secure long-term solution is designation as a protected area where feasible. This is because land use plans and their resulting zoning classifications are usually valid for a period of time, and subsequently subject to review and modification according to the provisions of the land use planning laws, without the enactment of new legislation.
- 137 In other words, even where prohibitions on harmful development in particular areas (for example, watercourses and wetlands) are well established in land use planning law, the resulting zoning plans and regulations are not a long-term substitute for the establishment of a protected area. Achieving nature conservation objectives in land use legislation depends not only on the prohibition of particular activities but also on active management of the environment, for example, controlling weeds and pests. An uncooperative landowner or rightsholder may be a poor conservation manager. In some countries, strict regulations restricting private land use are often met by demands from the landowner or rightsholder for compensation or by legal challenges to their validity. In other countries, these possibilities are limited. In all instances of land use regulation, the public interest in broader landscape conservation must in each case be balanced with the landowner's or rightsholder's interest in using the land or resources.

6 Establishment of protected areas

- 138 One of the key roles of protected areas legislation is to provide clear authority and the required decision-making processes for establishing and designating protected areas as part of the formal protected areas system. Fundamental legal considerations include setting up a system of protected area categories (from strict protection to multiple use) to classify sites by their primary conservation objectives, identifying who has authority to establish sites, prescribing the process of nomination, including public participation, along with essential supporting provisions. Protected areas legal frameworks should address these key elements using, as appropriate to local practice, both principal legislation and subsidiary instruments such as rules and regulations, in order to be most responsive to the objectives and needs of the protected areas system.

All sites proposed for inclusion in the protected areas system should comply with certain basic legal requirements. In addition, some proposed sites may call for special considerations because of their status as voluntarily conserved areas of indigenous or traditional peoples, local communities, or private property owners. The discussion below identifies the basic elements applicable to all sites. Special considerations for voluntarily conserved areas are noted where relevant.

139

6.1 Use of protected area categories

Protected areas legislation should indicate the management categories that will apply to protected areas established or recognized under the legislation, ranging from strict protection to multiple use (roughly equivalent to IUCN categories I–VI). These categories form the framework for classifying protected areas by management category, based on their primary conservation objectives. One of the lessons learned from management experience is that the system of categories used should include the full range of conservation objectives relevant for the country's system overall and its biodiversity or nature conservation goals. This approach will best serve the protected areas system and in-situ conservation over the long term.

140

Table III(1)-1: IUCN protected area categories

Category	Definition by management objectives
Category Ia: Strict nature reserve	Strictly protected areas set aside to protect biodiversity and also possibly geological or landform features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of conservation values. Such protected areas may serve as indispensable reference areas for scientific research and monitoring.
Category Ib: Wilderness area	Protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
Category II: National park	Protected areas are large natural or near-natural areas, set aside to protect large-scale ecological processes along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.
Category III: Natural monument or feature	Protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.
Category IV: Habitat/species management area	Protected areas aim to protect particular species or habitats, and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
Category V: Protected landscape/ seascape	A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value, and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.
Category VI: Protected area with sustainable use of natural resources	Protected areas that conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.
<i>Source: Dudley, 2008, pp. 13–23.</i>	

- 141 The 1994 IUCN guidelines on protected area management categories (IUCN, 1994) lay out the main protected area categories used in the World Database on Protected Areas (WDPA) and encouraged by the CBD and international instruments for use in national protected area systems. The IUCN categories have continued to be elaborated over the years as experience has grown but their substance and structure remain intact. The 2008 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) amplify the 1994 guidelines based on lessons learned by protected areas professionals. The IUCN protected area management categories are summarized in Part I, Table I-2, and reproduced below as Table III(1)-1.
- 142 Today the IUCN categories are increasingly used nationally and internationally. They have been recognized by international conventions such as the CBD and the Ramsar Convention, as well as by other international bodies, as a useful tool for countries to provide a formal structure for planning and international reporting. From the legal perspective, it is worth revisiting the CBD's support for use of the IUCN categories. Following the CBD's Programme of Work on Protected Areas statement encouraging their use, the Ninth Meeting of the Conference of the Parties to the CBD reaffirmed
- the value of a single international classification system for protected areas and the benefit of providing information that is comparable across countries and regions and [...] [encouraged] Parties, other Governments and relevant organizations to assign protected-area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes (CBD COP 2008 IX/18, para. 9).
- 143 The UNEP-WCMC has established standards for submission of national data to the WDPA and the UN List of Protected Areas (UNEP-WCMC, 2010). Among the information that is to be reported by data providers is the IUCN protected area management category assigned to national protected areas. This is in addition to the classifications that may be recognized locally (for example, national park). Countries that are not using the IUCN system of categories may choose not to report in this field. However, there are advantages for countries in using the IUCN category system, including the consistency it fosters for management purposes within the national protected areas system as well as for international reporting, such as that required by the CBD, Ramsar Convention and World Heritage Convention. In addition, use of the IUCN categories provides a common framework for cooperation across countries on experiences and lessons learned, and for strengthened collaboration between authorities responsible for terrestrial or marine protected areas with respect to shared species or ecosystems.
- 144 IUCN recommends that governments first set out the most appropriate framework of categories for their needs, consistent with the overall protected areas definition, and then look to the IUCN categories as a global categorization standard for reporting purposes. Many governments find that the IUCN categories also provide a useful framework for developing their own national protected area categories.
- 145 The protected areas legal framework should identify and flexibly define the management categories that will be legally recognized in the national system of protected areas. This may appear in the principal legislation or in subsidiary instruments, depending on legal practice. The legislation should also provide that protected areas recognized as part of the national system will be assigned one of the defined categories, based on the conservation values and objectives of each site. The legislation should link the protected area categories to management objectives according to primary conservation objectives, associated objectives and distinguishing features.
- 146 It is important to stress that WDPA data standards call for the IUCN categories to be reported by their numbers (1a, 1b, II, III, IV, V or VI) rather than by their names. This simplifies reporting and allows countries to continue applying their own terminology to sites, based on local preferences and tradition, regardless of conservation objectives, while reporting in a manner that provides consistency for comparing protected area types around the world, independently of their national denominations. For

example, many jurisdictions use the term ‘national park’ to cover all or most protected areas in the system, even though the conservation objectives and associated protected area category of individual sites may vary widely.

Box III(1)-10: IUCN guidance on assigning a protected area category

Key steps for assigning protected area categories to specific sites in the protected areas system may be characterized as follows:

- (a) Identify resource values and conservation objectives
- (b) Assess whether the site meets the IUCN definition of a protected area
- (c) If so, document the characteristics (legal status, management objectives) and justification for designation as a protected area
- (d) Use this information to propose a protected area category for the site
- (e) Carry out a consultation process to reach agreement on the proposed category
- (f) Final decision by the government on the category assigned, based on resource values, conservation and associated objectives, international obligations, and other considerations with respect to the site.

Adapted from Dudley, 2008, p. 40, Figure 3.

Site-specific legislation should provide that any site being designated or recognized as part of the formal protected areas system will also be assigned a protected area category using the IUCN classification system. Box III(1)-10 summarizes the key steps for assigning protected area categories to specific sites in the formal protected areas system. 147

6.2 Powers of establishment and recognition

Worldwide, protected areas are recognized as essential tools for ensuring the long-term conservation of nature and biodiversity along with associated ecosystem services and cultural values. Protected areas should be established and designated by law or other effective means to secure their long-term protection and to be consistent with international guidelines. For the establishment or recognition of a protected area to be part of the formal system, protected areas legislation should provide for the highest level of political decision making appropriate in the jurisdiction: the prime minister, president or legislature, or at least the minister in charge of the subject matter. This legal element is important not only for the long-term security of the site with respect to implementation and enforcement but is also critical in order to avoid subordination to the decisions of officials with authority in other sectors such as urban or industrial development, transportation, energy, or mining, where the actions of those agencies may threaten the objectives of a protected area. 148

Legislative provisions on the establishment or recognition of protected areas should include: 149

- (a) Requirement that the establishment and designation of all protected areas recognized as part of the formal protected areas system be by law or other effective legal means. In many jurisdictions, where designation is by a high-level executive official, such as a minister, the law may require that the order be submitted to the legislature for information, affirmative resolution or negative resolution, depending on local legal practice.
- (b) Recognition, as relevant to the jurisdiction, that customary law may provide authority for certain communities or peoples to set up voluntarily conserved areas on the land or sea areas under their control.

- (c) Requirement that the executive or legislative action necessary for protected area establishment and designation also applies to voluntarily conserved areas of indigenous or local communities, or private entities, where those areas are candidates for recognition and designation as part of the formal protected areas system.
- (d) Requirement that the specific boundaries of the designated protected area be defined by legal descriptions to the extent possible and recorded in official registries, and that identification of the protected area category and governance type be part of the designation.

150 The legislation may include a provision to the effect that formal amendment of an existing protected area boundary, category or purpose, where that amendment strengthens and advances the conservation objectives of the system, may be approved by order of the minister in charge, subject to technical and stakeholder consultations as appropriate, and laid before the legislature for information or action in accordance with legal practice.

151 Legal provisions should recognize the possibility that voluntarily conserved areas may become part of the formal protected areas system. This opportunity may arise in two ways. Land or sea areas may already be managed as voluntarily conserved areas by the communities, indigenous peoples or private entities who own or have control of such areas, and such areas may be recognized under customary or statutory law. Alternatively, new areas of high conservation value that do not have a recognized conservation regime may be proposed as voluntarily conserved areas. In either case, legislation should provide that any recognition of a voluntarily conserved area as part of the formal protected areas system must be based on an agreement negotiated between the parties involved. Such an agreement should be consistent with protected area legal requirements, have legal effect, state the rights and responsibilities of all participating parties, and be concluded with the free, prior informed consent of all concerned.

6.3 Nomination process for inclusion of new protected areas

152 Any site being proposed or nominated for inclusion in the formal protected areas system should satisfy at least two baseline requirements: (1) that the proposed site fits the definition of a protected area, as provided by the legislation and consistent with international guidelines (generally equivalent to the IUCN definition); and (2) that the proposed site's main natural and cultural values and priority conservation objectives fit within the goals and objectives of the protected areas system overall. These requirements should apply to any new area being considered for nomination, whether a state-owned or state-controlled site or a voluntarily conserved area that already exists or is being proposed for establishment and recognition. The protected areas authority should make these threshold determinations before initiating the formal process of nomination. It is useful for the legislation to specify these requirements in the context of the nomination process, in order to foster a standardized approach, re-emphasize the objectives of the legislation and reduce the risk that proposed areas fail to meet the legal requirements for a protected area.

153 Once these basic requirements are met and the protected areas authority has collected such additional background information as it deems necessary, it may make a public announcement concerning the proposed site and initiate the process of consultation and further data collection as needed. For the consultation process to be effective, the following essential information should be included in the public announcement for the nomination of a proposed site:

- (a) proposed protected area category to be assigned, based on primary conservation objectives;
- (b) proposed governing authority or, where this is under negotiation, potential arrangements relevant for the site;

- (c) to the extent appropriate, any special issues or attributes such as whether the proposed site is a voluntarily conserved area;
- (d) information about the broader landscape or seascape, uses of the surrounding land or marine areas, other sectors and jurisdictions involved, and whether the surrounding uses are compatible with the conservation objectives of the proposed site;
- (e) special issues that will need to be addressed if the area is established.

Protected areas legislation should also identify essential elements for the nomination process to proceed to formal designation, once it is determined that the site meets the requirements of the legislation. This process needs to be clear and should include adequate opportunity for public participation consistent with good governance principles (see Part I, section 4).

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Legislative provisions should include:

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- (a) Identification of the agency responsible for gathering and analysing data, studying proposed sites and making nominations, receiving nominations from others, managing the review process including public consultation, and preparing the final nomination for submission to the appropriate executive or legislative authority. Normally, this responsibility lies with the lead protected areas agency or authority, or the director on its behalf.
- (b) Provision that nominations for the designation of a protected area may come from other government agencies, individuals, communities or the public at large, and that these nominations should be directed to the agency or corporation responsible. Nominations may also be made by the agency directly.
- (c) Requirement that the agency responsible ensures an open, timely and meaningful consultation process, which includes: scheduling public meetings; identifying and consulting key stakeholders, local communities and the public at large; providing easy access to information and opportunities for all concerned or interested parties to participate; and initiating consultations and collaboration with other government agencies, scientific bodies, academic institutions, technical experts and business leaders. For this purpose, the agency should be authorized to use existing coordinating or advisory bodies as well as to establish new committees for the specific site.
- (d) Requirement that the nomination of a site be based on scientific analysis, using the best scientific information available to identify primary conservation objectives and the proposed protected area category for the site.
- (e) Requirement that the agency responsible undertake, to the extent relevant for the proposed site, an assessment of the potential environmental impact of the designation as well as its social impact, particularly on adjacent landowners and communities. (The CBD defines 'social impact assessment' as a process of evaluating, with the use of socio-economic indicators, the likely impacts, both beneficial and adverse, of a proposed action on the quality of life of a community; see SCBD, 2004a.)
- (f) Provisions requiring adequate, timely public notice by all reasonable means on each nomination for the establishment or enlargement of a protected area, in order to ensure that interested parties are informed in time to participate in meaningful consultations. This notice should be in an official gazette and in at least one daily or weekly local newspaper (a practice recommended by the Aarhus Convention Compliance Committee because of their determination that official gazettes are not sufficient). Additional popular means of reaching the public and stakeholders could also be suggested, including radio and television announcements, notices on the internet, and public meetings.

(g) Public notices should indicate where the written nomination and background documents may be read or obtained, the essential information that should be available in these documents, and the means by which comments will be received, including through written communications to an identified office, internet communications, community workshops or public meetings scheduled for this purpose.

156 **Special considerations for voluntarily conserved areas.** Where voluntarily conserved areas are being nominated for inclusion in the formal protected areas system, the nomination announcement should also identify the governing entity of the proposed site and the nearby communities or adjacent landowners to the extent that they may have an interest. The nomination of an area may come from any entity; however, the formal nomination recommending establishment or recognition would normally be by the protected areas agency or other entity empowered under the law to nominate such sites to the formal protected areas system. For these new governance approaches, the legislation may also note that the nominating entity may designate an existing mechanism or set up a new mechanism to facilitate consultations on the proposed site and develop a draft agreement for its inclusion in the formal protected areas system. The public consultation process for a voluntarily conserved area will need to be tailored to the specific circumstances, respecting both the public right to be informed and the right to privacy of the entity involved in the proposed voluntarily conserved area (discussed further in section 6.9, below).

6.4 Powers and procedures for reduction or declassification

157 Ensuring the long-term conservation of a protected area through legal designation is the fundamental principle that sets formal protected areas apart from other land use classifications. Once a site has been established as a protected area in accordance with the law, the legal presumption is for its permanent security or perpetual integrity. How the principle of perpetuity is addressed in legal provisions may vary, depending on whether the protected area is situated on state-owned or state-controlled lands and waters, or belongs to another governance type.

158 **State-owned or state-controlled protected areas.** There are two important legal principles for revocation of state-owned or state-controlled protected areas. If an area was established by an act of the legislature or parliament, revocation or reduction should only be by an act. The power to revoke the designation of all or part of a protected area should be placed at a level at least equal to that of the authority establishing the area, and preferably at a higher level, for example, the legislature or parliament when a minister or equivalent policy body has authority for establishment. This requirement is grounded in the principle that the high-level policy officials who designated the site as a protected area pursuant to the legislation expect their decisions to be respected by subsequent high-level policy officials and governments. Only exceptional circumstances not foreseen at the time of declaration, and of a compelling and overriding national interest, should be sufficient to overturn the designation. Such instances may include extreme weather events or other natural disasters, negative impacts from climate change, the intrusion of IAS, or other extreme factors which destroy the site and reduce its conservation values to such a degree that restoration is not feasible. If the action to reduce or declassify an established protected area is in conflict with the constitution, it may also be open to challenge in a court of law.

159 Another important legal principle is that the review and consultation process for revocation should be at least as rigorous as that required for establishment. This is necessary in order to ensure that the decision is taken for reasons of public interest sufficiently compelling to justify overturning the establishment.

Additional requirements may be incorporated, where feasible, in the protected areas legislation with respect to proposals for reduction or declassification, including the following: 160

- (a) The decision should be based on sound science and an analysis of the impact of such an action on the protected areas system or site, as well as on national biodiversity conservation goals.
- (b) The decision should take into account the long-term social and environmental impact of the revocation on ecosystem services and functions for local communities and the country as a whole.
- (c) No action to reduce in size or declassify an existing state-owned or state-controlled protected area should be authorized unless—
 - such withdrawal will not reduce or prejudice the conservation values or objectives of the system or site; or
 - there is a clear national emergency (consistent with the law) that is overriding and compelling that justifies the action, and there is no viable alternative response, even though the action may reduce or prejudice the conservation values of the system or site.
- (d) Reasons for proposing a reduction or declassification should be made public in writing in advance of the action, opportunity for public comment should be provided, and these comments shall be taken into account in the decision.

Mitigation measures: no net loss. There may be instances where compelling and overriding national interest requires a protected area in the formal system to be reduced in size or completely declassified. Protected areas legislation should provide for measures that may help to mitigate overall loss to the protected areas system. Such conditions could include: 161

- Adequate mitigation measures to sustain the objectives of the protected areas system, including restoration measures on other sites, as needed.
- The designation of new or expanded replacement areas of equal or greater value for biodiversity and nature conservation.

The mitigation and ‘no-net loss’ principles are endorsed by the IUCN World Conservation Congress (WCC) with respect to the impact of extractive industries on protected areas. In particular, the WCC adopted a resolution urging national governments, the private sector, and indigenous and local communities to prohibit further diversion of protected areas for large-scale infrastructure or extractive industry development, including mining. Where in exceptional situations such activities must be allowed, all parties are urged to “adopt full compensatory and mitigation measures, including creation of new or expanded protected areas that more than offset the negative impact of any de-gazetting” (IUCN-WCC 2009 4.087). 162

Special considerations for voluntarily conserved areas. The establishment and recognition of voluntarily conserved areas as part of the protected areas system is an emerging field with significant and widely varied experiences and experimentation. One of the main areas for continuing legal development is related to the elements or conditions for revocation or change of the protected area status of a voluntarily conserved area, and the consequences for the parties involved. 163

It is important to keep in mind that the inclusion of a voluntarily conserved area as part of the protected areas system should require action by the legislature (or equivalent high-level policy body) to give the designation legal status as a formal protected area and to ensure recognition by other sectors. In addition, voluntarily conserved areas will normally need a separate negotiated agreement, stating the rights and responsibilities of all parties and recognized by the legislature or equivalent body, as part of the formal designation. Under circumstances where the protected area status of a voluntarily conserved area must be substantially changed or terminated, the legislature or equivalent high-level 164

policy body that originally designated the site should again be involved, either to approve or record no objection to an amendment or revocation of the protected area designation.

- 165 The agreement recognized as part of the designation of a voluntarily conserved area should govern most actions, including the kinds of events that may trigger a change of status, and the processes and consequences involved. As with state-owned or state-controlled protected areas, natural disasters or other significant global or local change factors outside the control of the parties may alter the conservation values of area to such an extent that the agreed commitments and conservation objectives are no longer achievable. In such cases, it may be necessary to negotiate an amended agreement or, in completely devastated areas, perhaps to revoke the agreement altogether.
- 166 The agreement will normally also cover the kinds of actions that could constitute a performance breach by either party, for example, non-compliance with a material condition. A provision will normally lay out measures to remedy the condition or action, where possible. Consequences or penalties associated with the breach may also be provided. These could include restoration of a damaged site by the party at fault, repayment of financial benefits received or public investments made when the non-state party is in breach, or compensation and other special considerations to the non-state party where the government is in breach.

6.5 Demarcation of boundaries and zones

- 167 The outer boundaries of protected areas should be defined in the establishing legislation by the best means available to avoid uncertainty and potential future legal challenges. Legal definitions of boundaries may be provided in tables, appendices, schedules or a map, as long as these annexes are an integral part of the law. The level of detail required for a boundary definition depends on the means at hand. It would be unrealistic, for example, to require a sophisticated survey where the technology is not reasonably available and where fulfilling the requirement would postpone the establishment of the area by several months or years. The essential prerequisites are that the outer boundary is clearly identified on a map and demarcated on the ground, to the extent possible, using appropriate forms of delineation that are not unsightly or harmful to the environment.
- 168 If special legal classifications regarding ownership, management or tenure status already apply to the terrestrial, coastal or marine area, these should also be identified to the extent possible in the legal description and on the map. Such classifications may include lands or resource managed under customary law by identified entities, land donated for the public purpose of a protected area, or protected areas established or recognized under other legislation (for example, related to forests, fisheries, water management, indigenous or community conserved areas, or private reserves). Legislation should also require that boundaries be demarcated on the ground to the extent possible.
- 169 Historically, some of the most effective boundaries have been those that followed clear topographical or physical features such as ridge lines or rivers. Such physical features often coincide with habitats, species ranges or ecosystems. Some boundaries are tied to a natural feature such as a river, lake or coastline, whose path or shape may vary with the seasons or change permanently over time. Where this type of boundary is being considered for new or enlarged protected areas, it should be drawn to include, to the extent possible, natural variations that can reasonably be expected to occur, based on historical data.
- 170 It should be noted, however, that historical data is unlikely to be sufficient for predicting changes to natural features in the coming decades, particularly in the case of features tied to hydrologic cycles or sea levels. Climate change and other global change factors may cause some water bodies or adjacent

lands to shift significantly or disappear altogether. This means that descriptions of outer boundaries for new and existing protected areas which rely on natural features should be reinforced with clear geographic coordinates using geographic information systems (GIS) and other modern remote, aerial and light sensing technology where such technology is available, or at the earliest opportunity once it becomes available. In light of the dynamic nature of environmental change, this safeguard will be an important step to minimize future conflicts over property and resource rights. It should also be noted that data standards for the WDPA ask for the reference system used to identify the boundaries of protected areas being reported in order to transfer the data to the geographic coordinates system used by WDPA.

Protected area boundaries and climate change. A special legal issue that arises with climate change adaptation strategies is how to handle adjustments in protected area boundaries. Climate change may alter the relationship between a species range and protected area boundaries, or affect the ecosystem functions on which a protected area depends. Over time, there will be some protected areas where changing climate may alter local conditions and ecosystems to such an extent that current boundaries are no longer adequate to ensure preservation of the protected area's resources and conservation values.

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For new protected areas, legislation should require considerations of climate change in the design of outer boundaries in order to provide some flexibility for adaptive management. This also means that provisions on site-specific management plans should allow for some flexibility when identifying zones within a site in order to take into account projected climate change impacts using the best scientific information available. Such flexibility allows protected area authorities to undertake some adaptive measures within the scope of the site-specific management plan through administrative means rather than through a formal amendment which would trigger the legislative process.

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For existing protected areas, if outer boundaries or primary conservation objectives are to be amended to accommodate global change factors such as climate change, such actions would need to comply with the relevant legislative controls for amendment of a protected area, including public consultation, high-level policy approval, and tabling amendments before the legislature if that is the established legal process. There should be no exceptions for climate change adaptation that might loosen these requirements because that could open possibilities for abuse. Principal legislation normally has a long shelf life. These safeguards are needed to discourage proposals for adjustments to boundaries or primary conservation objectives ostensibly for reasons related to climate change when in fact intentions to pursue non-conservation interests such as new development, mineral extraction or other prohibited activities are the main motive. Being explicit about the need to follow legislative controls for such amendments also helps protected area authorities to withstand pressures from outside interests calling for exceptions and special considerations based on climate change when such measures cannot be scientifically justified.

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If it is not possible to carry out the necessary steps for formal amendment of the boundary of an existing protected area within the scientifically determined time frame required to begin adaptation, another option that protected area authorities should pursue involves negotiations with the relevant property owners of land adjacent to the concerned protected area (whether state, community or private) on accommodations in their management practices consistent, to the extent possible, with the needed adjustments. This should be an ongoing process generally with respect to spatial planning of landscapes and seascapes outside protected areas to ensure an ecosystem approach and promote connectivity. Negotiation and collaboration should be owner-specific and site-specific, targeting management needs and conservation values to be protected in a particular site, and should

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include technical assistance and other incentives to move toward a mutually beneficial conservation arrangement.

- 175 In general, protected area authorities should pursue coordination and collaboration (through formal or informal processes, as relevant) with other sectors, jurisdictions and resource users outside the formal protected areas system. These efforts should be pursued with a view to promoting compatible activities and the long-term biodiversity conservation of valuable adjacent areas outside the system. Compatible land use and nature protection measures in areas surrounding formal protected areas are important to minimize negative impacts to such areas, and to build into the protected areas system resilience to global change.

6.6 Interim protection

- 176 The purpose of interim protection is to safeguard the natural features and wildlife of a site nominated as a protected area until an assessment is made as to whether it should be declared a protected area. The nomination and consultation process may be lengthy, possibly involving additional data collection, impact assessments, and changes in the proposed design, category or governance arrangements. Without interim protection, development could proceed and investment and activities launched that may not be compatible with the proposed purpose of the site. In some cases, speculators and opportunists could move into or promote the area for personal exploitation and benefit, to the detriment of the area, and possibly creating irreversible damage.
- 177 Countries are increasingly providing interim protection measures for proposed sites. For example, Australian legislation provides for the designation of ‘conservation zones’ as an interim protection measure for a proposed area before being declared as a Commonwealth reserve (see the Australia case study accompanying these guidelines: Boer and Gruber, 2010a).
- 178 Protected areas legislation should provide authority to declare interim protection simultaneous with nomination and with immediate effect. This means that no change in the use of the area would be authorized during the period specified in the interim protection order. The protected areas agency managing the nomination process should also undertake measures to protect the resources, habitats and species on an interim basis. Since the purpose of interim protection is to protect the conservation values of the site pending its establishment or recognition as part of the formal protected areas system, existing uses that are compatible with this purpose may be allowed to continue.
- 179 Authority to declare interim protection should be placed at a high policy level to ensure statutory force. In many jurisdictions, the same policy level required for formal declaration of a protected area also issues orders for interim protection. It is important for the legislation to allow some flexibility and discretion to the designated authority for determining the time period for the interim protection. Sites where complex scientific, social and economic issues need to be resolved, for example, with proposed deepwater MPAs, may require up to five years (for an example from New Zealand, see Box III(2)-3 in Part III, Chapter 2). Sites where no such issues exist may need a significantly shorter period of interim protection.
- 180 Provisions in protected areas legislation on interim protection could include:
- (a) Giving authority to the appropriate high policy level official to declare, with immediate effect, interim protection for a site that has been officially proposed for establishment or recognition as part of the formal protected areas system, until the process of establishment or recognition is complete. ‘Interim protection’ or ‘interim conservation status’ could be defined to include the prohibition of

actions potentially detrimental to the existing natural state of the property or activities otherwise in conflict with the objectives of interim protection, to remain in effect until the decision on permanent protection has been made or for a specified period, with authority to the same official to renew the interim protection order at the end of the specified period, if needed.

- (b) Provisions indicating that where an area is given interim protection under the legislation, the protection also covers the subsoil, seabed, water bodies and water column, and airspace above the land or sea area.
- (c) A requirement that an interim protection order should clearly indicate the essential characteristics and features that prompted nomination of the site as a protected area, consistent with the IUCN definition and guidelines, as well as clear boundaries, primary conservation value, proposed protected area category, management objectives consistent with the proposed category and penalties that may be triggered by activities in violation of the interim protection order.
- (d) Where applicable, explicitly provide for an exception indicating that the interim protection order does not affect the existing practices of current users and owners of the identified area, whether indigenous peoples, local communities or private owners, as long as such practices remain compatible with and do not jeopardize the conservation values for which the site is being given interim protection.
- (e) The duty of the protected areas agency responsible for overseeing the proposed site through the nomination process to coordinate with other relevant sectors on the interim protection order, including, in particular, land use planning authorities who may use their legal instruments to reinforce the interim protection order by revising land use maps and records, and using zoning and permit controls as appropriate.
- (f) Consideration of compensation claims where an existing interest must be temporarily suspended. Such interests would normally relate to a specific authorization, permit, lease or licence to use the area or its resources (for example, fishing permits or forest leases). Conditions whereby the suspension of such authorizations may qualify for compensation and the procedures applicable would normally be provided in those instruments.
- (g) As appropriate, authority at the same high policy level to use an interim protection order in an emergency situation for areas that possess significant conservation value requiring urgent protective action in response to a serious unanticipated natural or human threat.

6.7 Compensation

Where there is available public land that meets the conservation objectives of the protected areas system, the government should give priority to establishing protected areas on that land where possible. However, not all countries have surplus public land available for designation as new state-owned or state-controlled protected areas. 181

Acquisition of rights. Creation of protected areas may in some cases involve acquiring private or communal lands or resource rights. Protected areas legislation should include standard provisions on negotiation, just compensation and the acquisition of lands or use rights determined necessary to fulfil the objectives of the protected areas system and the overall public interest. Typically, specific powers and procedures for the acquisition of lands or resource rights and the award of compensation are spelled out in other legislation, and need not be covered in the protected areas legislation. Subject to local legal practice, reference should be made to the relevant land acquisition legislation for this provision. 182

- 183 The rights that need to be acquired may take many forms and the compensation process may vary. Some existing public land may already be encumbered. Mineral, timber, oil exploitation, grazing and other resource leases, licences or permits might constitute legally binding contracts. The legislation should require negotiations to identify whether certain activities may continue to be carried out under conditions that are not harmful to the area's objectives. The legislation may provide, to the extent feasible, that negotiations will be undertaken to permanently phase out as quickly as possible those use rights that are detrimental to the objectives of the site. Such negotiations normally involve consultations and the participation of the contract holders, as well as government institutions authorized under other legislation.
- 184 In countries where land is mostly in private hands, for example, in Europe, the imposition by the state of a legal servitude, restrictive covenant or easement (in many jurisdictions, known as a 'conservation easement') may be used for the limited purpose of requiring some conservation practices on lands of high conservation value. These instruments provide a legal means for the state to support protected areas already in the formal system through buffers or corridors, or to include new private areas in the protected areas system without taking ownership of them. In this application, the conservation easement is used in a compulsory fashion, and is not voluntary.
- 185 Denmark provides an example where the conservation easement is a common and important government approach for creating protected areas. This is because most land in that country is already privately owned, and owners prefer to retain title in situations where the state decides to declare the property a protected area. Compensation is still paid, based on an assessment of the decrease in present market value and economic use of the property as a result of the servitude or easement. This is beneficial to the state because it is not required to purchase the land outright and beneficial to the owner who still possesses the property and retains the right to undertake compatible uses of the site and pass it on to heirs or sell it, with the conservation easement running with the land.
- 186 In other countries, customary use rights might be involved. Legislation should require that existing customary use rights are carefully investigated and identified, and accommodated as far as possible, where a site is established or recognized as part of the formal protected areas system. Where customary rights are identified, they may already be recognized in customary or statutory law and this should be clearly stated in the legal agreement associated with bringing the site into the formal protected areas system. Where such rights are legally unclear, one element of the negotiation should be the recognition of the rights as part of the agreement. Where it is necessary for legally recognized rights to be revoked or surrendered, there should be provision for compensation.
- 187 The establishment or recognition of a site to be part of the formal protected areas system may also require phasing out certain existing rights of way or authorizing new rights of way through other property, and these actions may raise compensation issues. Acquiring and limiting rights of way should also be addressed in protected areas legislation. As a general principle, protected areas legislation should limit or carefully restrict legal rights of way through formal protected areas consistent with the protected areas category.
- 188 An important exception to this general principle is where rights of way are needed through a formal protected area in order to access non-protected area property. For instance, there may be cases where certain community or private lands are surrounded by a formal protected area or are reasonably accessible only through the protected area. Protected areas legislation should recognize the need to provide for reasonable rights of way through the protected area in such cases. Provisions should require that such rights of way are defined as clearly and as narrowly as possible, consistent with the objectives of the protected area and the needs of the landowner or rightsholder. The extent of rights

of way and the restrictions associated with such use should be tailored to each case and laid out in an agreement.

Conversely, in some cases it may be necessary for the protected areas authority to acquire a right of way through non-protected area lands or waters in order to have reasonable access to the formal protected area. This situation should be acknowledged in protected areas legislation as an element to take into account in the design and selection of the site. 189

In special cases, the phasing out or reduction of certain public rights of way may be appropriate. For example, a public right of way may already exist for a road passing through a site proposed for inclusion in the formal protected areas system. Depending on the situation, relocation of the road may be a feasible option, or public use may be regulated through such measures as speed-reducing features in road design and the types of vehicles authorized. 190

Conservation without compensation. Many countries, especially in western Europe, have strong, obligatory land use and nature protection laws in addition to those specifically authorizing protected areas (see section 5.3, above). Such laws may require private owners to protect certain sensitive habitat types and ecosystems without compensation, as part of normal land use and environmental protection measures. In addition, protected area laws in a number of countries permit private lands to be included in the protected areas system without state acquisition. Depending on the legislation, this action may or may not trigger a right to compensation. 191

6.8 Special considerations for biosphere reserves

The UNESCO concept of biosphere reserves has substantially expanded since its beginning in the 1970s. The concept and establishment of biosphere reserves is promoted by IUCN and the world conservation community as a unique and valuable approach to integrated landscape or seascape management that supports protected areas and sustainable development. This position was reflected in resolutions of the IUCN-WPC (IUCN-WPC 2003 V.9; IUCN-WPC 2003 V.10). 192

The Seville Strategy for Biosphere Reserves and the Statutory Framework of the World Network of Biosphere Reserves lay out obligations, criteria and principles for an area to be included in the World Network of Biosphere Reserves (UNESCO, 1995). The Madrid Declaration on the UNESCO Man and the Biosphere Programme and the World Network of Biosphere Reserves (2008) and the Madrid Action Plan for Biosphere Reserves (UNESCO, 2008a) supplement and update the Statutory Framework. Acknowledging that individual biosphere reserves remain under national jurisdiction, the Madrid Action Plan expressly encourages states to include biosphere reserves in their own legislation (UNESCO, 2008a, action 11.1). 193

Taken together, these documents identify a number of legal requirements and related considerations for countries to incorporate in national legislation in order for their biosphere reserves to be recognized as part of the World Network of Biosphere Reserves. These considerations apply to the national protected areas legal framework overall as well as to site-specific legislation. Key elements particularly relevant for protected areas legislation include the following: 194

National policy. Biosphere reserves should be integrated into sustainable development policies and plans (including conservation and land use plans, development control processes, strategies for biodiversity conservation and sustainable use, and plans for protected areas), and linked to other relevant planning instruments. 195

- 196 **Definitions.** Biosphere reserves are defined by UNESCO as areas of terrestrial, coastal or marine ecosystems, or a combination thereof, that are internationally recognized within the framework of UNESCO's MAB Programme in accordance with the Seville Statutory Framework (Statutory Framework, Art. 1).
- 197 **Goals and objectives.** Biosphere reserves should have the following goals and objectives (Seville Strategy, supplemented by Madrid Action Plan):
- (a) To conserve natural and cultural diversity, giving special attention to fragmented habitats, threatened ecosystems, and fragile and vulnerable environments, both natural and cultural;
 - (b) To serve as models of land management and approaches to sustainable development;
 - (c) To serve as sites for research, monitoring, education and training;
 - (d) To serve a role in addressing emerging challenges in climate change, the provision of ecosystem services and urbanization as a principal driver of ecosystem-wide pressures.
- 198 **Zones.** The biosphere reserves concept involves the creation of three main physical zones (see Part I, section 6):
- (a) A legally constituted core area or areas, devoted to long-term protection according to the conservation objectives of the site, normally equivalent to IUCN category Ia or Ib (strict nature reserve or wilderness area), and set aside for conserving biological diversity;
 - (b) A buffer zone or zones, clearly identified and surrounding or contiguous to the core area or areas, where activities compatible with the conservation objectives of the core area may take place, similar to areas designated as buffers around legally designated protected areas;
 - (c) A flexible outer transition area (or 'area of cooperation') where sustainable resource management practices are promoted and developed, and which may allow a variety of agricultural activities, settlements and other uses (Statutory Framework, Art. 4.5).
- 199 It is worth noting that in the majority of cases the core area and parts of the buffer zone would fit within the IUCN definition of a protected area. The remaining portion of a biosphere reserve would normally fall outside the definition.
- 200 **Management requirements.** A management plan or policy is required for the entire biosphere reserve and should incorporate management plans for those parts of the biosphere reserve that have been legally constituted, for example, core areas that are part of the formal protected areas system.

6.9 General considerations for voluntarily conserved areas

- 201 Several legal considerations are worth reviewing here with respect to recognizing voluntarily conserved areas as part of the formal protected areas system. In some cases, the voluntarily conserved area may already be established by a community or private owner and be under active management. In other cases, the process of recognition as part of the protected areas system may include the formal establishment and legal recognition of customary or traditional land or resource use rights. Key legal considerations are as follows:
- 202 **Actions must be voluntary.** The primary consideration with respect to new governance approaches is their voluntary nature. There is no 'taking' of property or use rights by government intervention, as may sometimes be necessary when state-owned or state-controlled sites are designated to be part of the formal protected areas system. Negotiations and the final formal agreement between the government and indigenous peoples, local communities or private landowners must be based on meaningful access

to information, the opportunity to fully and freely participate, and a fair consultation process. Free, prior informed consent is a prerequisite for agreement.

Existing institutional arrangements should be respected. Bringing ICCAs and PPAs under national legal regimes may run the risk of imposing national institutional schemes, management structures and rules or regulations that undermine effective local arrangements already in place (whether customary law and institutions, or private management). Legislation should emphasize the importance of respecting such existing institutional arrangements as part of new governance approaches. Where existing institutions need to be strengthened or adapted to ensure that the primary conservation objectives of the site are achieved, the legislation should provide for negotiations to arrive at mutually acceptable arrangements. 203

Requirements for inclusion. Protected areas legislation should be clear about the criteria for recognition of an ICCA, PPA or other voluntary conservation initiative as part of the formal protected areas system. To ensure the ecological integrity of the system, these criteria should be consistent with its overall conservation objectives and should meet the associated requirements set out in the law. To qualify as a protected area within the formal system of protected areas, under the IUCN definition of protected areas, the site should satisfy the following requirements: 204

- (a) primary objectives of biodiversity and nature conservation, with additional objectives that are compatible with the primary conservation objectives;
- (b) sufficiently high biodiversity value (species, ecosystems, genetic, or a combination) to serve stated objectives of the protected areas system;
- (c) clearly defined and legally recognized rights, with respect to the property and resources involved, of the indigenous peoples, local communities or private entities taking conservation action;
- (d) legally enforceable commitment to long-term protection;
- (e) fit with a protected area management category used in the formal protected areas system (generally, categories equivalent in content to the IUCN protected area management categories I–VI).

Power to recognize a voluntary conservation initiative. Legislation should indicate which level of authority has the power to formally designate ICCAs and PPAs as part of the formal protected areas system, subject to a determination that the area meets the legal requirements for inclusion set forth in the legislation. This authority might rest with the minister in charge or another high-level policy official with sufficient powers to lend the designation statutory force. In a federal state or a state with a decentralized form of government, where powers for creating and managing protected areas are delegated to sub-national levels of government, the equivalent high-level policy official at the designated sub-national level will be appropriate, subject to any requirements from the national level. 205

Role of voluntary conservation agreements. The agreed arrangement between the government and a community or individual for inclusion of their conserved area in the formal protected areas system is normally laid out in a formal agreement, often called a ‘voluntary conservation agreement’, ‘conservation agreement’ or simply ‘agreement’. In terms of process, an area should not be formally recognized until such an agreement has been concluded. Thereafter, the high-level policy body with responsibility for designating protected areas should formally endorse the agreement. This action is necessary to record government consent to the terms of the agreement and to recognize the area as a formal protected area with legal boundaries, stated conservation and associated objectives, and rights and responsibilities of all parties. In some jurisdictions, this endorsement or approval is given by a formal resolution or other action of the highest policy-making body, for example, the legislature, parliament or congress. 206

- 207 **Recording agreements.** Once designation has taken place, the agreement should be recorded in the land registry or equivalent office, and attached to the deed as an express covenant to run with the land. Where resource rights rather than land are involved, conservation commitments over the resource should be officially recorded in a manner that is effective in law. Such legal agreements will normally include a standard clause for renegotiation or dissolution if unforeseen natural or human disasters make implementation impossible. Even without this clause, the law of contracts would normally recognize such a principle.
- 208 **Recognizing other conservation values.** Protected areas legislation should promote and recognize voluntary conservation initiatives as buffer zones, transition areas or ecological corridors, or for other conservation purposes adjacent to or related to an established protected area. Legislation could identify incentives that may stimulate such voluntary actions. The functions, duties and powers of protected area authorities, as laid out in the legislation, should include coordination and collaboration with the relevant land use and development authorities and neighbouring landowners or rightsholders to identify new initiatives and encourage support.
- 209 **Participation in all aspects of decision making.** Following good practice, legislative provisions related to voluntarily conserved areas should require the active, informed and meaningful participation of the involved indigenous or local communities, private landowners, or their legal representatives in all stages of negotiations and decision making related to the recognition of such areas in the formal system. Full participation includes participation in initial exploratory meetings; the identification or verification of boundaries; defining conservation objectives and other purposes; laying out rights and responsibilities of all parties; defining management, enforcement and incentive structures; and negotiating a formal contractual agreement.
- 210 **Public notice and information.** It is also important to give public notice of proposed actions that aim to bring a voluntarily conserved area into the formal system of protected areas. Public information should include the proposal, the proposed management category, the main conservation objectives and institutional arrangements for management or co-management. Private matters, such as private contributors and supporters, or donations to the person, corporation, association, NGO or other landholding entity involved, would not be made public unless so desired by the private parties involved.
- 211 Legislation should provide that public access to management or other agreements reached for the inclusion of voluntarily conserved areas in the formal protected areas system should be with the free, prior informed consent of the indigenous or local communities or private landowners involved. As relevant, information published or otherwise made available to the public, local communities and other concerned or interested parties should be provided in local languages and formats to the extent feasible.

7 Protected areas management

- 212 Several best practice management principles for protected areas have legal application. This section translates these principles into basic elements important to consider in protected areas legislation. The main legal elements relate to providing authority, requirements and guidance on the process and content of site management plans, including zoning. The legislation also should address buffer zones and connectivity conservation areas and, where feasible, give protected area authorities a role

in influencing or advising land uses in such areas to ensure compatibility of the site with the broader landscape or seascape.

7.1 Site management plans

Protected areas legislation should require that a site management plan is prepared for each protected area or cluster of contiguous or related areas (for example, where joined in a large multi-zoned area such as a biosphere reserve). Most international conservation-related treaties and programmes (for example, the World Heritage Convention and UNESCO's MAB Programme) require site management plans, and these obligations should be reviewed for provisions that may need to be included or cross-referenced in protected areas legislation 213

A site management plan for a protected area is a written scheme that guides and gives authority to the management entity responsible for carrying out specific management measures and implementing controls in order to preserve and advance the conservation objectives of the site. The scale and scope of a management plan should be proportional to the scale and scope of the protected area. A management plan should have certain core elements that are required for all plans. At the same time, a plan needs to have some flexibility for the management authority to adapt implementation to the conditions of the day, and to plan and implement adaptation for longer-range changes, including the impact of climate change, as long as in accordance with the law. 214

There should also be a correlation between management plans and management effectiveness. This requires that a management plan should identify, by the best means available, specific indicators that can be used to monitor and measure progress. A management plan is normally supported by other plans covering finance, annual and multi-year business plans and budgets, and operational work plans. Management plans and operational work plans should clearly define maintenance activities that are part of daily operations and not subject to EIA requirements, as opposed to other actions which would be (see EIA discussion in section 11, below). The site management plan should be recognized as part of a hierarchy of country planning instruments including national and regional land use plans and development plans. 215

A management plan, once approved, needs legal or operational standing to support decision making and in case judicial review becomes necessary. Generally, an approved site management plan becomes the main document governing management of the site, including activities that are prohibited to fulfil the site's primary conservation objectives or are otherwise regulated (for example, tourism, scientific research, recreational use). In some jurisdictions, provisions of the approved management plan dealing with prohibited and regulated activities themselves become the regulations for that specific site, and in other jurisdictions management plan provisions may be the basis for drafting detailed regulations. 216

While the approach in different jurisdictions will vary, protected areas legislation typically lays out a process for the preparation and approval of the plan that is sufficiently rigorous to give it statutory force as a legally and operationally binding plan. In many cases, the process involves approval of the management plan at a high policy level in the government, such as the minister in charge. In some countries, the plan is tabled before the legislature for a defined period, during which members may raise objections or seek clarifications. 217

Elements and related considerations for legislation. The legal drafter working with the protected areas authority should consider several legal elements related to management plans. The elements outlined below reflect good legal practice for inclusion in principal legislation or subsidiary instruments such as regulations, as appropriate. The discussion begins with general drafting considerations and 218

then turns to specific legal considerations related to requirements for a plan, plan content, and the process of preparation and approval. Protected areas legislation should provide that a management plan is required for all protected areas in the formal protected areas system, and that elements may need to be adjusted to fit the characteristics of a particular site including its governance approach and negotiated agreements associated with voluntarily conserved areas.

219 General drafting considerations. Several general points are important for the legal drafter to keep in mind in relation to legal provisions on site management plans:

- (a) Protected area legal frameworks normally include basic provisions on the general form and content of a management plan.
- (b) Public participation and the application of good governance principles are vital for effective management planning and implementation.
- (c) Approval of the plan normally involves a formal process laid down in legislation and clearly documented so as to give authority to the plan and provide accountability under the law.
- (d) A plan typically has a working life of 5, 7 or 10 years, and is then replaced by a new or updated plan, developed through a similar process as was used for the prior plan.
- (e) The specific content, scope and process applied may vary depending on the area, its conservation and associated objectives, land tenure status, governance arrangements, and capacity.
- (f) For the plan to be implemented, it must be realistic and feasible for the specific area to which it applies.
- (g) Plans need some flexibility to allow for normal adjustments in daily operations and to permit adaptive management for climate change and other global change factors, including addressing anticipated threats from IAS, as long as consistent with the legal boundaries, conservation objectives of the site and other legislative requirements.
- (h) Objectives should be specific enough to enable monitoring, and to evaluate management for adaptive purposes and accountability.

220 Management plan requirements. The following elements should be considered when drafting specific provisions on the preparation and approval of a site management plan:

- (a) Require a management plan for each protected area within the protected areas system. The plan should be in keeping with the scale and scope of the protected area.
- (b) Indicate the authority responsible for preparing the plan and managing the consultation and approval process (normally the relevant protected areas authority for a state-owned or state-controlled protected area and a negotiated arrangement for a voluntarily conserved area).
- (c) Require public consultation as part of plan preparation to inform and obtain comments from stakeholders and interested parties following good governance principles.
- (d) Require technical consultations to coordinate and receive input from other relevant public authorities (conservation, planning and other sectors whose legal mandates and operations may impact the site).
- (e) Provide that a single management plan may be prepared for a combination of contiguous or related areas where such an approach facilitates connectivity and system management, in which case the single management plan would satisfy the requirement for a separate plan for each area.
- (f) Allow for a management plan to include zoning of the site where needed to differentiate conservation objectives by management category in order to clearly distinguish management needs in different parts of a site and facilitate flexibility to change the zonation through the plan, unless a particular zone has been legally established as a separate protected area.

- (g) Where an approved plan does not exist for a site at the time of establishment or recognition, indicate the time frame within which a plan should be prepared, for example, within one year of designation, with allowance for a longer period, such as three to five years, in the case of a complex site requiring extensive scientific data collection and stakeholder consultation.
- (h) Until a final management plan is approved, authorize interim protection measures, normally through an interim protection order, to give managers the necessary authority to control activities and maintain the site according to its primary conservation objectives, using the precautionary principle.
- (i) Recognize the responsibility of the protected areas authority to undertake, within the framework of the approved management plan, adaptive management in response to climate change and other global change factors, using science-based management and the precautionary approach, drawing upon customary management practices and traditional knowledge where possible.
- (j) Require that the protected areas authority submit all approved management plans to the appropriate land use authorities for identification of the site and its management zones, as relevant, on land use planning maps.
- (k) Require regular monitoring and evaluation of plan implementation, and preparation of periodic reports to the minister (or equivalent authority) on progress with implementation.
- (l) Require periodic review and updating of each plan at reasonable intervals (for example, every five years) following the procedures laid out in the law.

Content of management plan. Important elements to consider for principal legislation or subsidiary legislation, depending on legal practice, with respect to the content of a site management plan include:

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- (a) the entity or entities responsible for implementing the plan;
- (b) the area's outer boundaries, as identified in the legal instrument establishing the area and recorded in official government land records and on official survey maps;
- (c) priority conservation values and objectives of the site, and its role as part of the national protected areas system, including biodiversity conservation, maintenance and restoration of ecosystems, ecological processes, geophysical features, and populations of endangered, threatened or vulnerable species and their habitats;
- (d) the biogeographical context and the relationship of the area, including connectivity, with the broader landscape or seascape;
- (e) socio-economic features of the area, including the presence of resident populations, or indigenous or traditional peoples, and sustainable use practices (particularly if the area is classified as equivalent to IUCN category V);
- (f) the main existing and potential threats to the site, including from IAS, and key management actions needed to prevent, control, reduce or eliminate the threats;
- (g) an assessment, using the best available science, to identify any parts of the site that may be particularly vulnerable to climate change, and measures that may help build resilience and allow adaptation to preserve the conservation objectives of the area;
- (h) any zones into which the area is to be divided, reflecting different conservation objectives, management needs and uses, and a clear demarcation of these zones;
- (i) identification of buffer zones and ecological corridors important to support the area;
- (j) protection and restoration of buildings, structures and places of cultural heritage significance;
- (k) identification of activities that are strictly prohibited throughout the site in order to prevent an adverse impact on the natural, cultural or historic features for which the area was established;

- (l) identification of opportunities for visitor use and enjoyment;
- (m) identification of compatible sustainable use practices and associated social and economic benefits to local communities;
- (n) promotion and oversight of scientific research, scientific inventory and monitoring activities;
- (o) land use, land development plans and land management practices affecting the area, adjacent to the area or in the region of potential impact of the area;
- (p) resource and other capacity needs to implement the management plan, including training, equipment and collaborative arrangements with other entities;
- (q) schedule of priority work to be undertaken in the area;
- (r) criteria for evaluating management effectiveness;
- (s) any existing or potential international designations of the site where management plan guidance is provided, for example, a world heritage site, Ramsar site or biosphere reserve.

222 Process requirements. Key requirements to consider including with respect to the process of plan preparation and approval include:

- (a) in general, application of good governance principles to ensure meaningful public participation of all stakeholders, especially affected or concerned indigenous and traditional peoples, local communities and private landowners, as well as the public at large;
- (b) public notice of the intent to prepare a plan for a particular area;
- (c) a clearly defined time period within which comments are received on a proposed plan;
- (d) location where a plan may be copied, accessed and reviewed (for example, office, street address or website), and the person, office or address to which comments may be forwarded for consideration;
- (e) opportunity for public meetings on the content, purpose and timeline of the plan,
- (f) comments made by the public to be taken into account in the formulation of the plan;
- (g) copies of the draft plan to be sent, prior to approval, to all government agencies or departments likely to be affected by the plan (for example, fisheries, forestry, land use planning);
- (h) approval of the draft plan by the minister or equivalent policy level to ensure its legally binding nature;
- (i) timely public notice through standard means (for example, daily and weekly local newspapers and legal notices in the official gazettes) of approval of the plan and the date on which it comes into effect;
- (j) copy of the current plan to be kept on file in a public place for public review and, as appropriate and feasible, with copies available for a reasonable price.

223 Additional considerations for new governance approaches. The considerations and requirements outlined above apply universally to state-owned or state-controlled protected areas. In addition, some special considerations apply with respect to the preparation and implementation of management plans for voluntarily conserved areas that are recognized as part of the formal protected areas system:

- (a) Voluntarily conserved areas are also required to have management plans but there may be special legal considerations with respect to that requirement (see section 7.4, below) and the parties involved should take the above elements as guidance.
- (b) It is important for protected areas legislation covering new governance approaches to indicate the need for flexibility in the application of the above elements, to ensure they are relevant and appropriate for the special governance approach and conservation objectives of the site.

- (c) Elements concerning the management plan for a voluntarily conserved area will be tailored to the specific circumstances of each site, and reflected in agreements reached between the parties.
- (d) The legislation should be clear that negotiations and resulting agreements between the parties involved with new governance approaches will address who prepares the plan, its specific content, monitoring, reporting, updating, and other necessary elements as agreed through the free, prior informed consent of all parties.

7.2 Zoning within a protected area

Protected areas legislation should recognize the concept of zoning as a management tool. The legislation should indicate that the management plan for a particular site may divide the area into zones or units to define different management needs (strictly protected areas, tourism areas, restoration areas). Alternatively, zones within a protected area may have their own protected area categories, defined permanently under the law rather than in the management plan alone. The former option provides flexibility for adaptive management and adjustment of zone categories through the management plan. The latter option provides greater legal certainty about the zone's primary conservation objectives, but a change in category would occur only by law.

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Zoning is particularly useful for handling large multi-purpose and multi-dimensional protected areas, and for providing connectivity between core areas. It is also an appropriate tool for accommodating a variety of governance types or mixed tenure arrangements within a single designated protected area. For example, through careful zoning it may be possible within a multi-purpose protected area to have a terrestrial, marine or mixed land-sea protected area, or a 'biodiversity hot spot' under strict protection surrounded by a habitat conservation zone, some controlled tourism or a multiple-use area, or a mixed tenure system with a state-owned or controlled protected area next to a voluntary conserved area (ICCA, PPA, or both). Outstanding natural monuments or mixed natural-cultural sites may be specifically delineated in a zoning scheme as part of a site management plan. Various zones may also reflect different governance arrangements with respect to ownership, occupation or use rights.

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An important benefit of zoning as a management tool is that it allows protected area authorities to recognize and manage a particular area for its multiple values and purposes and mixed tenure types in a clearly defined and systematic way within a single legally designated site. It allows gradations of regulation, depending on the values being protected and changing conditions, and creates flexibility for the manager to address adjacent areas in a compatible manner. Without this tool, protected area authorities are left to designate each zone as a separate site, an approach that is likely to provide less flexibility for administration and management, and to leave some important connecting areas unprotected.

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7.3 Buffer zones and connectivity conservation areas

An important management principle with legal application is for protected area system plans and site plans to identify buffer zones around established protected areas, and ecological corridors or other connectivity conservation areas, to support and protect the integrity of a site and the system overall. Buffer zones and connectivity conservation areas also provide flexibility for the adaptive management of a particular site to accommodate biome shifts and the impact of dynamic environmental and global change factors.

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Some protected areas may themselves serve as buffer zones or connecting corridors for other areas needing more strict protection. This can be achieved through management zoning or by using different

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legally designated protected area categories. Most jurisdictions, however, will also need to identify buffer zones and connecting corridors on lands or waters outside formal protected areas in order to indicate where certain uses, unless controlled, may negatively impact protected areas. This means that planning and land use laws play an essential role in helping to protect these areas through compatible uses.

- 229 It is important for the legal drafter to consider a provision in the protected areas legislation requiring that the necessary buffer and connectivity conservation areas are identified as part of the planning and establishment process for the protected areas system as well as individual sites. Protected areas legislation should provide that buffer zones and connectivity conservation areas are clearly identified by protected area authorities as part of the process of management plan preparation. This should include demarcation to the extent possible, a description of the key conservation values and functions that such areas provide for the protected areas system or site, and conservation measures and compatible land uses that are recommended to preserve these functions.
- 230 This information is essential for land use planning, development control and environmental protection agencies, to guide land uses and development activities in ways that are compatible with the functions being served by buffers and connectivity conservation areas. Some countries have strong land use planning legislation that supports protected area laws by incorporating protections for buffers and ecological corridors (see the French example in Box III(1)-9).
- 231 Protected area authorities should also have the duty to coordinate with other public and private entities that may be planning construction or other operations in identified buffer or connectivity areas, to inform them of the conservation importance of these areas. In addition, other entities planning development or approving development in such areas should be required to coordinate with the relevant protected areas authority and, where there may be potentially significant impacts, to undertake an EIA (discussed further in section 11, below).
- 232 Protected areas legislation should encourage ongoing communication and participation with other government entities, environmental organizations, local communities, indigenous or traditional peoples, private property owners, and other rightsholders with interests in areas serving buffer and connectivity purposes, in order to build understanding of the biodiversity and ecosystem values involved. Protected area authorities should use these communications and relationships to identify or promote opportunities to negotiate voluntary conservation agreements for compatible land uses in such areas.
- 233 Within protected area legal frameworks, the issue of buffer zones and connectivity conservation areas may be addressed in the principal law or in supporting legislation. Some authority to designate buffer zones is commonly included in principal protected areas legislation. Subsidiary legislation may provide further details, depending on the legal system.
- 234 Connectivity conservation areas present special challenges because they may extend across large areas and many different land use zones. Land use planning legislation plays a critical role in recognizing connectivity conservation areas that are needed to support protected areas and maintain essential ecological functions (for example, hydrologic functions). Some countries may address issues of connectivity in other conservation legislation. A survey of legal approaches to connectivity, conducted by IUCN in 2007, found that a variety of methods are being used, from a specific connectivity law in the Ukraine to the incorporation of connectivity issues in a biodiversity law in Bulgaria (see Table III (1)-2).
- 235 South Korea provides a special example of a legal framework developed for an environmentally sensitive mountain region, using multiple existing instruments and new enactments to create a system of corridors connecting many protected areas within an overarching intra-governmental framework.

This unique legal and management system, based on a vision of conservation connectivity, has taken years to develop and has involved the participation of virtually all sectors and levels of government (see the Baekdu Daegan case study accompanying these guidelines: Miller and Kim, 2010).

Table III(1)-2: Legal approaches to connectivity conservation

	Connectivity law	Legal instrument creating or enabling a specific corridor	Protected areas law	Spatial planning law	Biodiversity law	Nature conservation / protection law	Wildlife law	Forestry regulations
Argentina			✓ sub-national law					
Bhutan		✓						
Bolivia								✓
Brazil			✓					
Bulgaria					✓			
Canada		✓						
Denmark				✓				
Ecuador		✓ municipal ordinances						
Germany						✓		
Hungary				✓		✓		
India							✓	
South Korea		✓						
Lithuania			✓					
Netherlands				✓				
Poland						✓		
Slovakia						✓		
Ukraine	✓							
Venezuela					✓			
<i>Source: Moore and Shadie, 2007.</i>								

Specific considerations for legislation. A number of specific legal elements on buffers and connectivity are relevant to consider for inclusion in principal protected areas legislation or supporting legal instruments, as appropriate:

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- (a) Provide that the protected areas system plan identifies on a map and in descriptive terms any buffer zones, ecological corridors and other connectivity conservation areas needed to support the priority conservation objectives of the system and of specific sites.
- (b) Provide that site management plans or associated plans identify on a map and in descriptive terms any buffer zones and ecological corridors needed to support the primary conservation objectives

of the site, its long-term viability within the protected areas system, and the broader landscape or seascape of which it is a part.

- (c) Where feasible, design buffer zones and identify connecting corridors to recognize and incorporate natural areas that are under the jurisdiction of other resource management agencies and being managed for conservation purposes (for example, forest reserves, fisheries reserves, water catchment areas), and make collaborative arrangements with such agencies for that purpose.
- (d) Provide that protected area authorities explore and develop voluntary conservation arrangements with indigenous or local communities, or private landowners on lands or waters in designated buffer zones and connecting corridors for the purpose of promoting compatible activities in those areas.

237 The legislation should provide guidance on additional information important to include, where feasible, in the site management plan when identifying buffer zones or connectivity conservation areas for the site, including:

- (a) main supportive conservation functions of these areas for the protected area site;
- (b) any special status such areas may already have under other legislation (for example, forest or fishery reserves, water catchment areas, community conserved areas, PPAs, environmental protection zones in land use plans);
- (c) current ownership or other tenure status of the areas and resource uses, if known;
- (d) principal government agencies involved in governing these areas, where relevant;
- (e) current or potential activities in these areas that pose a major threat to the functions they are meant to serve as buffer zones or connecting corridors;
- (f) activities in these areas that are currently or potentially compatible with or could advance the conservation functions of the protected area.

7.4 Special considerations for voluntarily conserved areas

238 The following special considerations are important to keep in mind concerning management provisions in protected areas legislation when voluntarily conserved areas are being recognized as part of the formal protected areas system.

239 **Requirement for a management plan.** Protected areas legislation should be clear that protected areas of all governance types should have a management plan identifying the main management activities and specifying who will be responsible for implementation. At the same time, legislation should emphasize the need for flexibility when new governance approaches with voluntarily conserved areas are involved. Specific management needs and the responsibilities of all parties may be defined as part of the final negotiated agreement for the site to be part of the formal protected areas system.

240 **Essentials of plan content.** The principal role of a management plan is to provide guidance on how a site should be managed to protect over the long term the primary conservation objectives for which the site was designated. This includes defining the essential management actions and controls through which the conservation values are to be sustained, requiring basic monitoring and periodic reporting to assess effectiveness of these measures, and setting out clear rights and responsibilities of all parties to ensure accountability. For these purposes, legislative provisions should indicate the essential elements to be covered in a management plan for a voluntarily conserved area:

- (a) legal description of the area;
- (b) identification of all parties involved, using the best means available;

- (c) primary conservation objectives of the area and the corresponding protected area management category or categories, if zoned;
- (d) rights and responsibilities of all parties involved in the conservation and management of the area;
- (e) other planning or special development provisions, as long as they do not conflict with the primary conservation objectives of the site, the protected areas system plan or other land use plans applicable to the area;
- (f) specific regulations determined by the parties to be necessary for controlling outside activities or guiding sustainable resource use, human settlement or other agreed activities, consistent with the primary conservation objectives of the site.

Preparation of the plan. A number of entities may have relevant experience preparing management plans, including the lead protected areas agency, protected area authorities in other sites, environmental NGOs, consulting firms, specialists from universities, and private individuals or groups who have previously prepared a management plan for their conserved area. Legislative provisions should indicate that issues to be negotiated between the parties should include the process for preparation of the required management plan, who will have lead responsibility and any supporting roles, and the time frame for preparation, which should be reasonable and responsive to the needs of the site. These elements should be identified in the final conservation agreement or in supplemental documents that are part of the final agreement that recognizes the site in the formal protected areas system. 241

For example, the final agreement may state that the lead protected areas agency, in consultation with the entity undertaking the voluntary conservation initiative, will prepare the first draft within 12 months. Alternatively, the agreement may indicate that the designated management authority for the site will take the lead responsibility and that technical assistance will be provided, as needed, by the government, an NGO or another entity with expertise. Approval of the final draft would continue to be the responsibility of the minister in charge or other designated high-level official with that general power under the law. 242

The level of public involvement and consultation with respect to preparation of the management plan should be agreed among the parties. The parties should also agree on the final approved management plan that will be publicly available. The content of the public plan should normally be similar to the content of a management plan for a state-owned or state-controlled protected area (for example, legal description, conservation objectives, management category, regulated and prohibited activities, authority responsible). The parties may agree on elements of the plan that should be made public only in summary form. In addition, with voluntarily conserved areas, any of the private parties involved may request that certain information that was part of the negotiations remain confidential. Such information may include specific contributions and financial support from private parties or other long-term financial planning issues. In such cases, it would not be appropriate for this information to be made public. 243

Adaptive management. The principle of adaptive management should apply to a voluntarily conserved area in the formal protected areas system as much as to a state-owned or state-controlled protected area. The requirement for periodic review and updating of management plans provides the principal process for addressing and responding to changed natural and human conditions when the adaptive measures needed go beyond the authority of the existing management plan. Legislative provisions requiring regular review and updating of management plans should be clear that the process also applies to management plans negotiated and prepared for voluntarily conserved areas. 244

8 Conservation agreements

- 245 A conservation agreement (in some jurisdictions called a ‘voluntary conservation agreement’ or simply an ‘agreement’) is the main legal instrument for recording mutually agreed long-term conservation and other voluntary arrangements and conditions negotiated between the government and involved communities or private parties for inclusion of their voluntarily conserved areas in the formal protected areas system. Protected areas legislation should provide for the use of conservation agreements, the negotiation of such agreements using good governance principles and the basic elements to be covered.
- 246 A conservation agreement contains substantive provisions identifying important features of the area to be protected, the primary conservation objectives and the corresponding protected area management category or categories that will apply to the site. The agreement provides permanent protection for the features or area to which it applies. It is recorded in the official land registry as part of the deed or property identification. If the land is sold or otherwise transferred to another party, the agreement remains in place. Incentives that are conditional on the permanent arrangement (for example, reduced taxes, revenue benefits, security of tenure) are clearly identified in the agreement and also remain in place should the entities change. The agreement is approved or endorsed by the high-level policy body responsible for designating protected areas, for example, the minister in charge or the legislature or parliament, in order to give it full legal force and effect. A material amendment would require the same process.
- 247 This legal instrument is recognized internationally as a valuable means to tailor individual agreements for sites to be included in the protected areas system. Many countries (for example, Australia, the UK, the US, and several countries in Latin America) provide for the use of conservation agreements to set forth commitments and other elements for voluntarily conserved areas to be recognized as formal protected areas.
- 248 One of the important elements to cover as part of the negotiation process for a voluntary conservation agreement is the governance or management arrangements that will apply to the site. This includes the specific institutions taking the lead in governance and management, whether these functions are assumed solely by one institution at the national, community, private-sector or NGO level, or whether there is a co-management arrangement among entities. The agreed arrangements should be described in a legally binding agreement, variously called a management or co-management agreement or contract. This instrument should clearly lay out the specific rights, responsibilities, incentives and disincentives associated with the agreed governance and management arrangements (see Part II, section 5.4). A common form for a co-management agreement, once finalized, is a set of documents comprising a management plan and other accords, provisions for specific projects, and related initiatives (Borrini-Feyerabend et al., 2004).
- 249 A voluntary conservation agreement may incorporate directly the key provisions of a governance or management agreement, including any co-management arrangements, or it may be attached and referenced as an integral part of the main conservation agreement, for purposes of implementation and judicial review. Where it is anticipated that governance arrangements may change from time to time, it may be advisable for the legislation to recognize two documents (the main conservation agreement and the separate management or co-management agreement) so that governance changes can be made without amending the conservation agreement which may require a higher level of policy involvement.
- 250 The protected areas legal framework should enumerate several basic elements important for guiding the development, content and application of voluntary conservation agreements. These include:

- (a) Definition of ‘owner’ or ‘holder’ of the real property or resources that are the focus of the agreement;
- (b) Legal description of the property involved;
- (c) Legal status with respect to ownership and tenure use rights;
- (d) Power of the minister, or protected areas authority with the approval of the minister, to enter into a conservation agreement with the owner or holder of the land or other property of natural or cultural significance;
- (e) Power of protected area authorities to negotiate a conservation agreement;
- (f) Requirements for the agreement to take effect, such as endorsement or acceptance by the high-level policy body responsible for designating protected areas, and requirements for amendment of the agreement in material matters through a similar process;
- (g) Enumeration of substantive items that should be covered, such as the rights and obligations of all parties;
- (h) Identification of the measures each party agrees to carry out (for example, management, enforcement, surveillance, monitoring, scientific research, technical assistance) and the rules that will apply;
- (i) Description and identification, where appropriate, of governance arrangements (or indication by reference to another document);
- (j) Problems of breach, provisions for arbitration, provisions for termination;
- (k) Monitoring requirements and, where possible, indicators by which to measure effectiveness of management actions in sustaining the primary conservation goals of the area;
- (l) Requirement of registration in official land records, with agreement attached to the land regardless of landholder;
- (m) Location where the voluntary conservation agreement or its summary, as the case may be, can be viewed by members of the public, when so agreed by the entities involved.

Legislation should require that government land survey and mapping offices reflect the new status of the property in official government maps, including maps for public review and maps used for land use planning and development decision making. Publications promoting the protected areas system may also show the voluntarily conserved area as part of the national system.

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It should be noted that even with measures to secure the conservation status of ICCAs and PPAs by agreement and other legal means, in some countries the threat to the longevity of the agreement may come from the government itself. For example, in the state of New South Wales, Australia, the Environmental Planning and Assessment Act 1979 allows conservation agreements (which are considered to be regulatory instruments) to be set aside by a land use plan to allow development to be carried out (s. 28) (see the New South Wales case study accompanying these guidelines: Boer and Gruber, 2010b). Pressures such as these on the security of voluntary conservation arrangements underscore the importance of the highest possible policy and law recognition for such initiatives once it is determined that they are to become part of the formal protected areas system. As an added measure for security, when voluntarily conserved areas are recognized as part of the formal protected areas system, the involved landowner should register a covenant to the deed reflecting the conservation status of the land in perpetuity.

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In many jurisdictions, general property law is not well suited to the creation of covenants attached to the land. In such cases it may be necessary to provide for the covenants by statute. An example of this statutory approach is the Nature Conservation Act 1992 of Queensland, Australia. Section 51 of that Act addresses ‘Conservation agreements and covenants binding’ as follows:

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(1) A conservation agreement that is recorded by the registrar under section 134 in relation to land is binding on—

- (a) the successors in title to the landholder who entered into the agreement; and
- (b) persons who have an interest in the land.

(2) A conservation agreement (other than an agreement mentioned in subsection (1)) is binding on the persons mentioned in section 45(2).

(3) A conservation covenant is binding on—

- (a) the land-holder and the land-holder's successors in title; and
- (b) persons who have an interest in the land.

9 Regulated activities

- 254 Legal frameworks play an essential role in sustaining protected areas according to their conservation objectives by giving authorities clear and adequate powers to regulate activities inside the designated area. In many countries, certain powers to regulate and monitor activities also extend to adjacent areas, particularly to identified buffer zones. For example, the protected areas legislation of Peru requires that the master plan of each protected area also define the surface area of its buffer zone, and further stipulates that activities in the buffer zone shall not jeopardize the achievement of the protected area's objectives (Natural Protected Areas Act, Law 26834, Art. 25). Regulations under the Act specify that the National Protected Areas Service has three distinct powers in buffer zones: setting its boundaries; providing a prior opinion for forestry permits or permits for activities requiring an EIA or environmental adaptation and management programme; and supervising and monitoring activities undertaken in buffer zones (see the Peru case study accompanying these guidelines: Solano, 2010).
- 255 Protected areas legislation should contain general provisions setting out the framework of controls available for use in the protected areas system and in individual sites in order to advance the objectives of the legislation and fulfil relevant multilateral obligations. A standard approach is to identify the main types of regulated activities in the legislation and to give the minister in charge (or other appropriate high-level body) the power to make additional regulations as needed. These may include more detailed rules for specific uses (for example, certain public recreational uses, service concessions, sustainable use of certain renewable land and marine resources, or scientific research).
- 256 Provisions on regulated activities normally translate into offences and punishments when the provisions are violated. So it is important that the principal legislation address this area sufficiently to give adequate guidance for enforcement purposes, covering the full range of anticipated situations. Where subsidiary rules or regulations are needed to give effect to provisions in the principal legislation, these should be enacted in a timely fashion giving priority to the most critical needs. Ideally, draft regulations needed to give effect to critical aspects of the law, such as the regulation of activities inside a protected area, should be part of the information file accompanying the draft law through the review and enactment process.
- 257 Where the protected areas legislation is the principal law for the protected areas system, this framework of controls should be sufficiently broad and comprehensive to cover anticipated needs for all protected area categories and governance types provided by the legislation. Where the legislation being considered is for a specific site within the system, provisions on regulated activities should provide a framework of controls consistent with that provided for the system and tailored to the special requirements of the site.

There are three main legal techniques used for regulating activities inside a protected area: 258

- (a) prohibiting certain activities under most or all situations;
- (b) requiring written permission to undertake certain activities, which are otherwise prohibited;
- (c) allowing certain activities without written permission, as long as general rules are followed.

Some standard prohibitions will, in principle, apply across all protected area categories and governance approaches within the formal protected areas system. Standard prohibitions for the system overall would normally cover such activities as the dumping of hazardous or toxic substances, harming an endangered species, or defacing a protected natural or cultural monument. Other activities, whether controlled by written permit or through general rules, would be governed by the standard provisions in the legislation, supplemented by regulations or rules enacted or developed for individual sites according to each site's primary conservation objectives, assigned protected area management category and management plan. This two-tiered approach allows flexibility for protected area authorities to apply the most appropriate regulatory regime to a particular site, according to its conservation objectives and condition. 259

The kinds of activities normally regulated inside a protected area relate to use, and the conduct of persons, groups, the private sector or government entities, and may be broadly divided into three main areas: 260

- (a) access to all or part of a protected area;
- (b) use of the area and its amenities (for example, recreation, education, scientific research, sports hunting or fishing, camping, commerce, using certain natural resources sustainably);
- (c) preventing and controlling potentially harmful conduct of persons or entities that may threaten the site's conservation objectives (for example, causing pollution of the site or damage to protected species habitats, wildlife or cultural resources of the site).

9.1 General principles

A number of general principles concerning regulated activities are worth reviewing here as background for drafting specific provisions. 261

Conceptual approaches to regulation. There are two main conceptual ways of approaching regulated activities in protected areas legislation. The first is to identify all activities that may be permitted and indicate that any activities not expressly permitted are prohibited. To be effective, this approach requires careful selection and wording of all possible permitted activities to minimize misinterpretation and abuse, and to avoid the need for amendment in the future, which may be difficult and time-consuming. The second approach is to indicate the types of activities that are generally prohibited or otherwise controlled, and to assume that activities not in those categories are permitted. In practice, both techniques are useful and legislative provisions will likely use a combination of approaches. As protected areas face growing pressures from development and global change, management will become more complex and dynamic. It will be increasingly important to have well-defined prohibitions and other controls over activities for authorities to use and clearly communicate to different user groups for purposes of compliance. Authorities will need to be able to point to specific provisions as the basis for enforcement actions. The discussion that follows draws on a combination of approaches, indicating the kinds of activities that should be prohibited or controlled by written permission, and those that may be generally permitted when consistent with the site's management plan. 262

- 263 **Compliance with international obligations.** As discussed at some length in Part I, there is a substantial body of global and regional environmental treaties with provisions concerning biodiversity conservation and protected areas management. These instruments set out commitments and obligations that may directly relate to the management of national protected area systems and sites, and the activities that may need to be controlled to meet biodiversity and sustainable development goals. In formulating provisions on prohibited or controlled activities for protected areas, the country's international treaty obligations concerning regulation of activities within the protected areas system should be reflected in the protected areas law either directly or by reference to other legal instruments in force.
- 264 **Primary conservation objectives.** The kind of activities that need regulation in a particular site will depend on its conservation objectives. Powers of regulation may be broadly laid out in the legislation to cover anticipated needs across the entire formal protected areas system. Selection of specific regulatory provisions applicable to a particular site will need to be guided by the conservation objectives of that site. To be clear about the relationship between regulated activities and conservation objectives, protected areas legislation should indicate that any activities authorized in a particular site, whether by permit or general rules, should be consistent with and advance the primary conservation objectives of the site.
- 265 **Protected area category and management plan.** Legal provisions should provide that any activities permitted in a particular site, whether authorized by written permit or general rules, should be consistent with any general regulations for the system overall and in accordance with the protected area category and management plan for the specific site. One of the main purposes of the site management plan is to define what management measures are needed to preserve and advance the conservation objectives of the site as reflected in its assigned protected area management category. It is important to be clear that, within the framework of controls provided in the law, certain activities may be permitted in some protected area categories and not in others (for example, use by the public would not normally be allowed in an area needing strict protection). Even for sites assigned the same protected area management category, management plans may call for different controls because of different site conditions. For example, two areas classified as category III national parks may require different treatment with respect to use by the public because one site is able to withstand normal visitor traffic while the other has experienced overuse and needs more restricted visitor access in order to recover.
- 266 **Management plan has regulatory effect.** In some jurisdictions, the management plan becomes the regulatory instrument for a specific site, while in other cases the management plan is the basis for enacting more specific rules or regulations applicable to a specific site. Where a site has interim protection (see section 6.6, above) pending final designation or where a management plan has not yet been approved, the protected areas authority responsible should have powers to prohibit actions that are potentially detrimental to the existing natural state of the property or that are otherwise in conflict with the objectives of interim protection.
- 267 **Authorized officers protected when acting in official capacity.** Activities undertaken by staff (including scientists and administrative officers) in their official capacity should not fall within the regulatory controls provided in protected areas legislation. This also applies to other individuals or entities, including a government entity, when authorized by the protected areas authority to carry out assigned activities on its behalf.

9.2 Prohibited activities

Regulation of activities within the protected areas system may be grouped into the following general categories: 268

- (a) prohibitions related to the destruction or alteration of natural systems or species habitats;
- (b) prohibitions related to killing, capturing, taking, removing, damaging or disturbing any wildlife, cultural resource or other object, for exploitation or any other purpose;
- (c) prohibitions related to causing damage to ecosystems and species habitats from pollution and other threats;
- (d) prohibitions related to the introduction of IAS or exotic species.

A general legislative provision on prohibited activities may not be able to envision all the prohibitions needed over time with respect to the system and specific sites. It is therefore important for the legal drafter to identify the most immediately needed prohibitions with sufficient detail to ensure clarity for implementation, and to add a general prohibition covering other activities that, from time to time, may pose a serious threat to the system or particular sites. 269

The precautionary principle should apply when identifying prohibitions. Pursuant to this principle, some prohibitions may be appropriate where there appears to be substantial risk to the conservation objectives of the site even in the absence of scientific certainty. (The precautionary principle is discussed at length in Part I, section 3.4) 270

The types of activities that protected areas legislation would normally prohibit in all sites that are part of the formal protected areas system include: 271

- (a) killing, taking or disturbing any endangered, threatened or otherwise legally protected native species, whether marine or terrestrial;
- (b) disturbing or damaging the critical habitat of any endangered, threatened or otherwise legally protected native species, including removing the nest or contents of the nest of a species;
- (c) destroying or damaging a site serving important ecosystem functions that has been designated or identified for special protection (for example, a protected water catchment area);
- (d) removing, damaging, demolishing or excavating any part of a cultural site, natural monument, historic shipwreck or other significant cultural site inside a protected area;
- (e) entering any part of an area that is closed to that user group or individual;
- (f) interfering with, damaging, removing or replacing any official notices or signs;
- (g) introducing any IAS or exotic species;
- (h) using explosives or poisons;
- (i) using or having in possession any prohibited weapon, including any firearm or spear-fishing gun;
- (j) discharging toxic or hazardous substances, including but not limited to petroleum or substances made from petroleum, and household cleaners;
- (k) landing an aircraft or driving or otherwise using a motorized vehicle in areas where doing so is prohibited, whether on land or water;
- (l) flying an aircraft in prohibited airspace above a protected area;
- (m) disposing of or dumping sewage, solid waste, refuse, rubbish or litter anywhere other than in designated containers or areas;
- (n) damaging or defacing any physical structures inside a protected area;

- (o) conducting any mining exploration or exploitation activities within or directly affecting a protected area, whether terrestrial or marine.

272 **Exceptions.** As a general principle, activities such as those listed above present such a serious threat to the primary conservation objectives of any protected area that they should be prohibited in any protected area category or type. Where an otherwise prohibited action is required under exceptional circumstances, it should be undertaken by an authorized officer or an entity or individual acting as an agent on behalf of the officer. Under extraordinary circumstances, such as an emergency, an activity that is normally prohibited may need to be allowed or authorized for specific persons or groups. The legislation should be clear that exceptions to the prohibited activities may be allowed only in extraordinary circumstances of need, such as an emergency. The legislation should clearly state that authorization of an exception to a group or person should be in writing, identify the specific group or person receiving permission, indicate the specific purpose and duration for which the permission is valid, and include any conditions, controls or monitoring requirements that the authority may determine are necessary to minimize unintended consequences or negative impacts to the site.

9.3 Activities requiring written permission

273 Protected areas legislation should include provisions giving protected area authorities the power to allow certain activities inside a protected area only by written permit or other appropriate form of authorization such as a licence, lease, contract, concession or other agreement. Without written permission, such activities would be prohibited, and carrying out such activities inside a protected area without a permit would be an offence under the law. The provisions should state that no permission will be given unless the activity is consistent with the protected area management category and management plan, and that the authority responsible may take into account other factors as relevant to preserve the conservation objectives of the site. The authority may attach additional terms and conditions to the permit as may be required to protect the area and for reasons of public health and safety.

274 Regulating certain activities by written permit provides important benefits for effective management of a protected area. It allows the protected areas authority to review each application on a case-by-case basis and make real-time assessments about whether the proposed activity is in accordance with the site's protected area category and management plan. It also gives the authority the option of denying or attaching conditions to the permit. That judgement needs to take into account many factors, including the existing natural condition of the area, current management priorities that may disallow such activities, as well as capacity limits and cumulative impacts if several permits have already been issued for the same area. This power gives the protected areas authority a flexible tool for adaptive management by prohibiting, restricting or shifting certain activities in particular areas as needed for restoration or recovery. A permit system normally also generates revenues through fees.

275 Activities requiring written permission that legal drafters should consider including in the legislation, as appropriate, are as follows:

- (a) reside on, occupy or cultivate any land or plant, or otherwise grow or harvest any crop, whether on land or sea;
- (b) access, explore or harvest any genetic resources;
- (c) use or manipulate any waters within a protected area;
- (d) take, collect, remove or alter any flora or fauna (with the exception of endangered, threatened or otherwise legally protected flora or fauna, where such actions should be prohibited, as noted above);

- (e) hunting or fishing by specific communities or groups for subsistence purposes;
- (f) hunt or fish for sport or recreation;
- (g) construct or destroy any building or other structure, whether on land or sea;
- (h) undertake scientific research at the student or professional level, whether for public, private or academic purposes;
- (i) carry on any still photography or make any film or video recording for sale or commercial use;
- (j) operate a business or solicit, sell or attempt to sell any goods or services, including tour companies and tourist businesses;
- (k) distribute pamphlets, leaflets, announcements or other information of a commercial or community nature;
- (l) land an aircraft on land or sea, or fly in protected airspace above a protected area;
- (m) engage in any charitable or fund-raising activity;
- (n) organize or arrange a special public event (such as a concert);
- (o) organize or arrange a private event (such as a wedding) where the gathering is over a specified number of people (for example, 25 persons, depending on the capacity of the site);
- (p) remove or excavate any earth or beach sand.

Concessions. Concessions are a special form of written permission, providing authorization to carry out contracted services in a protected area for such things as building and grounds maintenance, mooring maintenance, tourism amenities (gift shop, restaurant), tour operations and, in some cases, habitat, forest and other resource management activities where required by the management plan (for example, periodic thinning of underbrush, management of pests). A concession may also grant the right to undertake special kinds of activities in a protected area such as exploring or developing certain natural resources. Commonly, the process of issuing a concession contract involves a more extensive set of steps than that involved in obtaining other written permissions. These steps include open bidding, a formal application based on government rules for bidding and contracts, negotiations, and finally a contract specifying the obligations of all parties, agreed conditions, duration, charges and revenue distribution. Options for using concession arrangements in a protected area or in a defined site within the area should be consistent with the management plan and associated operational plans (for example, concerning tourism amenities or forest management).

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The concession permit is a useful tool in many situations. It provides a standardized means of bidding and control, for example, over the establishment and monitoring of specialized operations needed in protected areas, particularly where sites are large and complex. It serves the added function of providing expertise where the in-house capacity of the protected areas authority may be limited. Many concessions may provide an opportunity to distribute benefits from the protected area through jobs and other income to local and surrounding communities and businesses. In addition, concession contracts normally generate some revenues for the government from fees and other assessments.

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Implementation considerations. As with decision making about prohibited activities, the precautionary approach should be used when identifying activities to authorize by permit. Activities that may present a substantial risk to the conservation objectives of the site should not be authorized, even if they may be allowed in principle under the management plan and even in the absence of scientific certainty about the risk. Legislative provisions should give protected area authorities the power to decide on a case-by-case basis whether allowing certain activities through permits, licences, leases or other written authority is appropriate for a particular site and what conditions may need to apply.

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- 279 Assuming an activity is consistent with the management plan, considerations may involve balancing in-house capacity with the need for controls in a specific area in order to protect its primary conservation objectives. For example, it may be difficult to administer a permit system where staff or resources are limited. In a remote area where little use by the public is anticipated, a permit system may not be justified in terms of the costs involved in relation to the benefit to be gained and, unless specific threats arise, general rules of use may be sufficient.
- 280 In contrast, where protected areas for use by the public are near population centres, a permit system may be needed if overuse becomes an issue or if different types of use begin to conflict (for example, bird watchers or wildlife photographers versus group picnickers). Selling food or souvenirs inside a protected area is an activity where a permit system is normally needed to control where and how vendors operate, in order to minimize disturbance to nature and safeguard public health and safety.
- 281 Scientific research is another area that should normally only be authorized through a permit system. Numbers and types of researchers can be controlled through permits to minimize negative impacts on the protected area and conditions can be tailored to the situation for such matters as access, equipment and sharing research results.
- 282 Even with a permit system in place, it is important that regulations or rules for its use include safeguards to foster its effectiveness, including authority to suspend or modify the issuance of permits, concessions and other forms of written permission where changing conditions so require. Monitoring and periodic evaluation of the permit system is an important operational requirement in order to assess how well the permit system is providing controls that effectively protect the conservation values of the protected area to which it applies. The issuance of too many permits, for instance, can weaken the effectiveness of well-intended controls, and authority should be available to limit or cease the issuance of permits for a particular activity when needed to protect a site. Similarly, effectiveness may be weakened where permit conditions, particularly on prohibitions, are not well monitored and users abuse the permission. Periodic checks on compliance with specific permit conditions and the use of appropriate fines and other penalties for abuse are essential implementation elements.
- 283 Some proposed activities requiring written permission may first need a rudimentary or full assessment of the environmental and social impact. A proposed activity could automatically trigger the formal environmental and social impact assessment procedure when it is a listed activity under the law (see EIA discussion in section 11, below). In addition, the protected areas authority should have the power to order a full EIA for a proposed non-listed activity, or to request a study in some other appropriate form when, in the judgement of the authority, the proposed activity poses a threat to a protected area. Granting permission to undertake the proposed activity should be at the discretion of the protected areas authority and subject to conditions the authority may impose. Where a formal EIA is needed, all associated requirements and procedures should be complied with, including the requirement to give the public an opportunity for comment and the right to appeal any decision. Finally, protected areas legislation should require a transparent and fair process for issuing written permits, including reasonable public access to information on the number and types of permits issued.

9.4 Activities allowed by general rules without written permission

- 284 Most formal protected area systems will include some protected areas or zones that may be used by the public without the need to obtain written permission as long as certain general rules or conditions of use and conduct are respected. Use by the public without the need for written permission would only be permitted for specified activities when consistent with the protected area's management

category and management plan. The use of general rules to control activities inside a protected area, as compared to requiring written permission to undertake such activities, applies most commonly to those protected areas assigned categories generally equivalent to IUCN category II (national park) or IUCN category III (natural monument or feature). Protected areas assigned other categories, reflecting their primary conservation objectives, may also have some zones or sites within their boundaries where certain uses by the public are covered by general rules. Such rules would be designed according to the specific features of the site in order to protect the natural and cultural amenities open to the public, as well as to protect the health and safety of the users.

Protected areas legislation should authorize the making of general rules for activities that may be allowed without obtaining written permission in certain protected areas in the formal system as long as consistent with the assigned management category and site management plan. The legislation should also authorize the protected areas authority to collect reasonable fees for any such activities it deems appropriate and to differentiate fees by user group (for example, resident versus non-resident, group versus individual, member versus non-member). 285

Depending on legal practice, different legal techniques may be used to set out general rules or conditions of use for protected areas in the formal system that are open to the public. In many countries, the principal protected areas legislation will itself contain substantive provisions laying out rules or conditions of use and conduct of persons in protected areas open to the public. Where the legislation is site-specific, provisions may also be included on general rules or conditions of use and conduct for persons using the specific protected area. In both cases, the legislation normally also authorizes the issuance of additional, more specific regulations or rules of use for an individual site, consistent with its management plan, when needed from time to time to protect the conservation values of the particular site. These additional rules may be issued by the protected areas authority responsible through regulations, directives, notices, orders or other means, according to legal practice. 286

In some legal systems, the principal legislation indicates the subjects to be regulated, leaving the details to be spelled out in subsidiary legislation, regulations or other instruments. This technique could apply whether the legislation is for the formal protected areas system overall or for a particular site. Where this technique is used, it is important that such regulations be issued and in effect by the time that the protected areas involved are opened to the public for those uses. 287

General rules or conditions of use are normally not complicated. They should be widely available and easy to understand. The approach used to define the rules may be to indicate permitted activities, prohibited activities or a combination of the two. The legal drafter will want to select the approach and content of the general rules to be included in the legislation (whether principal or site-specific) that best meet the needs of the protected areas involved and facilitate the most effective implementation and compliance on the ground. 288

General rules of use and conduct, whether in principal legislation, site-specific legislation or subsidiary legislation, may be framed to indicate permitted activities. With this approach, activities not identified as permitted would normally be prohibited. Examples include: 289

- (a) allowing entry into the protected area only through designated entry points or entrances, and upon payment of any entrance fees that may apply;
- (b) allowing public access to the protected area during designated hours of operation;
- (c) specifying where certain uses may be subject to conditions or special arrangements (for example, a special ceremony at a sacred site);

- (d) allowing vehicles of a specified type (automobiles, motorcycles) on designated roads, and parking areas designated for such vehicles;
- (e) allowing picnicking, camping, hiking, waking or biking only in areas designated for that purpose;
- (f) allowing skiing, swimming, recreational fishing or the mooring of recreational boats up to a certain size only in designated areas, posted with notices or indicated on maps;
- (g) allowing small pets but only on a leash and in designated areas.

290 General rules associated with the use of a protected area or zone open to the public may be presented as prohibitions, for example:

- (a) prohibition on taking domestic animals into the protected area;
- (b) prohibition on allowing domestic animals to stray into the protected area;
- (c) prohibition on bringing any plants or plant material into the protected area;
- (d) prohibition on setting fires, or the requirement that fires be limited to designated areas for camping purposes and under controlled conditions specified in general notices at the protected area site;
- (e) prohibition on the disposal of any litter or other waste inside the protected area, with a requirement that all items brought into the area must be taken out of the protected area;
- (f) alternatively, a prohibition on the disposal of litter or other waste anywhere other than in designated containers;
- (g) prohibition on using firearms, except in accordance with a written permit;
- (h) prohibition on commercial filming, photography, video recording, solicitation, dissemination of materials, commerce or gatherings over a certain size, except in accordance with a permit.

291 General rules or conditions of use for protected areas open to the public need to be available and understood by the public in order to be respected and effective. There are several ways to make such information widely available and known to users. The legislation should call for authorities to widely disseminate the general rules through the best means available. This may include having the main rules printed on notices posted at entrances to the site, included in a separate information brochure, published in newspapers, tourism magazines and handouts available at tourist entry points to the country, or posted on websites. If an entrance fee is charged, visitors could receive a pamphlet about the rules along with their entrance ticket. Additional signs could be posted inside the protected area along pathways and driveways to remind and guide visitors about where they may walk, drive or use facilities. Notices or other posted information should be in a form and language that is easily understood by the local public and other anticipated users. If maps of a particular protected area are available, permitted uses could be indicated on the maps and key prohibitions may also be noted as appropriate.

9.5 Regulating category V and VI areas

292 In recent decades, the international conservation community has recognized the valuable role protected areas play in sustainable development and the benefits such areas may provide beyond their borders. In 2008, the link of this protected areas role to biodiversity conservation was formally acknowledged in an IUCN-WCC recommendation stating that protected areas established specially to support the interaction of people and nature, with traditional management practices or sustainable resource use practices, contribute significantly to the conservation of biological diversity (IUCN-WCC 2009 4.123). This recognition has increased emphasis on the need to expand protected area systems into areas where people and nature interact for livelihood opportunities (embracing especially IUCN categories V

and VI) and to welcome new governance approaches that could bring voluntarily conserved areas into formal protected areas systems.

A management plan for a category V or VI area should specify the types of activities that are authorized, who has rights and responsibilities with respect to these activities, and any conditions or limitations that may be needed to safeguard the primary conservation objectives of the site while providing livelihood benefits. For these categories, permitted activities will normally be oriented more towards sustainable use rather than strict protection. Rights may be defined by statutory law, customary law, traditional use, legal ownership or as part of a negotiated agreement associated with the governance approach. 293

For example, a specific community or group may reside within a designated category V protected area, or have rights to harvest certain products or use certain ecological services in a category VI protected area. The management plan and associated documents would identify the community, its membership, the rights and responsibilities of all parties, and permitted and prohibited activities consistent with the area as a whole or with different zones. General prohibitions provided in the law would normally continue to apply. In the case of activities authorized only by written permission under the law, this requirement could be met by issuing a permit, lease or licence, or by including a provision in a separate agreement (including the management agreement). 294

Voluntarily conserved areas. The general processes and provisions governing activities in category V and VI areas also apply to voluntarily conserved areas. Voluntarily conserved areas of indigenous or local communities or private property owners may have conservation objectives corresponding to category V or VI protected areas, and when recognized as part of the formal system their management plans should include permitted and regulated activities appropriate for that category. 295

For a voluntarily conserved area, conservation agreements associated with recognition of the area as part of the formal protected areas system should spell out the commitments of all parties (see discussion in section 8, above). These agreements are normally key reference documents for the development of the management plan which guides what activities may or may not be permitted. 296

In category V and VI protected areas, privileges of the specific indigenous or local communities, corporations, or individuals involved will include activities that emphasize human interaction with nature, sometimes in residence participating in traditional management (category V) and at other times with activities related to sustainable resource use (category VI). The commitments made and laid out in formal agreements will include activities that the parties have agreed may be permitted, who is permitted to carry out such activities, and any conditions, controls or monitoring actions required to preserve the site's primary conservation objectives. Provisions on permitted or controlled activities should be sufficiently clear to guide regulation inside the protected area, both with respect to actions of the parties involved and outsiders. 297

Parties governing or managing voluntarily conserved areas recognized in the formal protected areas system may have privileges not allowed in state-owned or state controlled protected areas, or may wish to prohibit activities that are allowed in state-owned or state-controlled areas. For example, sustainable use of natural resources within the area (fishing, agriculture, or commerce in native flora or fauna, as long as not endangered, threatened or otherwise legally protected) may be allowed for those managing the voluntarily conserved area, while the public may be prohibited or restricted from these activities. Negotiations should normally determine these rights and responsibilities consistent with the law, and they should be clearly identified as part of the resulting agreements in order to protect all parties involved. 298

299 Where written permission is required under the law to undertake certain activities, for example, harvesting natural products or residing in the area, that requirement could be satisfied by provisions in the formal agreement. Or, as with other protected areas, a written permit could be required for a special event such as a public concert. Activities that are already being undertaken at a site, or that can be anticipated, should also be dealt with in negotiations and their status, whether permitted, restricted or prohibited, should be clearly addressed.

9.6 Recreational activities

300 Special attention should be paid to recreational use, an activity increasingly in need of greater control. Many protected areas have political and popular appeal because of their recreational benefits. However, increased interest worldwide in using protected areas for outdoor recreation (for example, boating, hunting, fishing, snorkelling, diving, hiking, backpacking, camping, safaris) has made recreational demand a growing management challenge. In many protected areas, recreational overuse now threatens the survival of natural sites. This includes simply entering an area in some instances, for example, entering a bird or turtle sanctuary during nesting season.

301 To promote visitor understanding of the natural values of a site and why some activities need to be prohibited or otherwise regulated, protected area authorities need to develop and offer appropriate educational materials and activities. Visitors who understand and support protected areas are important advocates and communicators in the community for compliance with rules of use and conduct. Visitors and other supportive stakeholders may be mobilized as a 'conservation community' friendly to the protected area, to help promote attitudes and values that support conservation and the work of the protected area manager.

302 It is important for the legislation to emphasize the need to promote sustainable visitor use and apply ecologically sustainable tourism principles to those parts of the protected area, as identified in its management plan, where tourism and recreational activities are permitted (see Eagles et al., 2002). Worldwide, interest in ecologically sustainable tourism has generated efforts to set out principles, standards and guidelines for tourism companies and governments on planning and managing tourism in an environmentally sustainable manner.

303 Science-based management and planning concepts such as 'limit to acceptable change' and 'thresholds of potential concern' are being increasingly used to help determine the recreational carrying capacity of wilderness areas (Thomas and Middleton, 2003). These concepts are used to identify and monitor the impact of different recreational uses so that managers can restrict certain uses when they conflict with goals (for example, the goal of quiet recreation versus open access to a trail, picnic site or swimming area). Managers need the flexibility to use these tools as part of adaptive management to restrict, reduce or prohibit certain uses when limits have been reached.

304 The legal drafter working with protected area managers may want to review these initiatives for key points important to keep in mind for legislation, regulations or operational guidelines. For example, the CBD Secretariat has an ongoing project to develop guidelines on biodiversity and tourism, with particular attention to sustainable tourism in vulnerable ecosystems (CBD, Biological Diversity and Tourism website). The World Heritage Convention operates the World Heritage Tourism Programme that encourages sustainable tourism activities in world heritage sites. The Programme develops policies and processes for site management, and for State Parties to the Convention to address this increasingly important management concern. It also collaborates with other United Nations (UN) bodies and the tourism industry to maximize tourism benefits and minimize adverse impacts (UNESCO, Sustainable Tourism Programme website).

An additional issue is important to consider with respect to controls on tourism and recreational activities. This relates to the appropriate amount of detail to include in legislation as compared to administrative or operational instruments. With recreation and tourism control, the nature and type of activity may change with time, for example, where areas closed for the purpose of rehabilitation can again be visited or used, where areas need to be closed seasonally to safeguard wildlife nesting or breeding, or where overuse or periodic health or public safety issues may require closure or use restrictions. 305

Some matters related to tourism control should probably not be dealt with in legislation or regulations because they would restrict the flexibility needed to adapt to changing conditions. Instead, the legislation or regulations could provide a general provision authorizing appropriate controls. More detailed matters could be dealt with at the administrative level, based on the general regulatory authority to control the use of protected areas. Such matters may include: 306

- (a) redistribution of visitors to less crowded areas;
- (b) requirement for visitor registration in advance for certain uses in certain areas;
- (c) regulation of the volume of use in particular protected areas or the duration of stay;
- (d) direct limitations on the number of people allowed in each area (for example, on a first come, first served basis).

9.7 Emergency and incident management

Emergencies and other unanticipated threatening incidents present special situations that may require exceptions to some standard prohibitions. Incidents creating emergency conditions for the protected area may occur outside or within the area. Such incidents range from fire, oil spills or extreme weather events to outbreaks of IAS or local conflict. In all cases, the key to handling emergencies and special incidents is prior coordination and joint planning. Particularly in emergencies that require a quick response, contingency planning will provide guidance and an agreed approach to the range of permissible actions that may be taken without prior consultation with other jurisdictions as well as the types of actions that would under all circumstances require consultation. 307

Inside a protected area, it will usually be clearly within the jurisdiction of the protected areas authority to take all actions necessary to protect the area and minimize damage in an emergency. The situation may be more complicated where access to the protected area, for example, with special equipment in case of a fire, is through private land or land under the jurisdiction of another ministry. Protected area agencies need a contingency plan to enable a rapid and effective response to extreme situations. Where applicable, such planning should include cooperative agreements on rights of way for emergency purposes, shared use of equipment and other anticipated needs. 308

Situations involving emergencies outside the protected area but potentially affecting the area require more advance planning and coordination. Decision making in such cases may be the lead responsibility of other authorities. Remedial actions under consideration could potentially result in negative impacts within the protected area, for example, fire management or pest management involving area-wide spraying of pesticides. 309

For the legal drafter, it is important to consider measures that could be included in protected areas legislation to help reduce the risk of emergency decision making by other authorities that negatively affects the protected area. For example, the protected areas legislation should provide that such decisions require prior consultation with the protected areas authority for the purpose of fully exploring 310

all options and choosing, to the extent possible, the alternative with the least damaging consequences for the protected area. It is also important to provide that a representative from the appropriate protected areas authority be included, as standard practice, in emergency working groups and task forces for disaster prevention, contingency planning and post-disaster recovery.

10 Compliance and enforcement

- 311 Effective regulation and control of activities in protected areas depends largely on voluntary compliance, self-regulation and incentives for cooperation. Government enforcement capacity is commonly constrained by the shortage of resources. Community participation, support and partnerships with protected area authorities provide valuable mechanisms for effective compliance.
- 312 Building community support for compliance requires applying principles of good governance (discussed in Part I, section 4). These principles, as applied to compliance with and enforcement of protected areas legislation, include such measures as ensuring that the provisions regulating activities are appropriate for preserving the primary conservation values of the protected areas involved; providing information to the community on these rules and regulations and why they are needed; receiving input from the community on concerns, priorities and additional needs in order to improve compliance (for example, benefit sharing or other incentives); and ensuring that the provisions in place on regulated activities are supported by appropriate provisions on offences, penalties and other disincentives for non-compliance (Harman, 2005).
- 313 This section reviews basic considerations important to include in protected areas legislation for compliance with and enforcement of regulated activities. It begins by providing context on the various tools available to promote compliance with protected areas legislation and the relationship of compliance to enforcement. It then reviews the range of functions of authorized officers, from enforcement to outreach and education, and considerations associated with offences and penalties of a criminal and civil nature.

10.1 Achieving compliance

- 314 It is necessary to keep in mind that the purpose of defining offences and penalties in legislation is not simply to set out for prosecutors what they must prove to obtain a conviction in court, important though this is. The ultimate objective is to persuade those subject to the legislation to conduct themselves in such a way that they do not breach its provisions, and thus to achieve compliance. In other words, compliance and enforcement are related. The greater the compliance, the less need there will be for enforcement. In drafting offences, therefore, the legal drafter must have two audiences in mind: the courts and the regulated population. It is crucial that offences are defined in such a way that they can be understood by those who are subject to them.
- 315 Compliance may be achieved in ways other than relying on the threat of prosecution and punishment. In fact, unless enforcement agencies have significant resources, it may be difficult to translate the threat into action. Much will depend on precisely who is being regulated. Some communities may already place significant value on biodiversity conservation, so that obtaining compliance with legislation that reflects these values is relatively straightforward. For example, communities using traditional management practices may employ local taboos and rules to restrict or prohibit the taking of particular species at certain times during breeding and migration cycles. If clashes occur over differing views of what biodiversity conservation requires, or conflicts arise between the cultural practices of indigenous

peoples and the needs of biodiversity conservation, immediate resort to prosecution in order to obtain compliance may be inappropriate. It may create hostility to protected areas legislation, and this will be counterproductive. In contrast, there should be a strong presumption that those carrying out illegal logging or land clearing in protected areas for commercial purposes should be automatically prosecuted.

There may also be situations where prior or current occupants of protected area lands may have knowledge of these areas that can be particularly helpful for management. This local knowledge, while often different from that of protected area managers, may provide useful and complementary understanding for effective protected area management and compliance by surrounding local communities. 316

To encourage compliance it is important to provide information and opportunities for local people to appreciate the values of a protected area. Education programmes for schools and villages are required to help residents appreciate the important benefits of establishing a protected area and imposing restrictions on access and use. The regulations should be well publicized, and the purposes and values of the laws clearly explained to local communities and stakeholders. 317

Legislative provisions may include guidance on how enforcement and other authorized officers are to balance their emphasis on promoting compliance as compared to pursuing enforcement actions. For example, the Cook Islands Environment Act 2003 provides that, in exercising its powers, the National Environment Service “shall, except where the circumstances require the immediate exercise of any power to protect the environment, at all times have regard to the principle that it may better serve the community by consultation, negotiation and education” (s. 10(4)). This does not go as far as saying that prosecution should be a last resort but it does require the agency to consider whether it could achieve compliance by relying on other forms of dispute resolution or enforcement. 318

Voluntarily conserved areas. Where voluntary conservation initiatives are concerned, it is important that the legislation require negotiated arrangements for enforcement and surveillance which respect and build on customary, community or private arrangements already in place. Provisions should recognize that community or other local or private surveillance and enforcement mechanisms may be used where mutually agreed, and that specific roles and responsibilities will be clearly established by agreement as part of the negotiation process. Moreover, it may be important to authorize the making of further rules or changes in the rules, based on negotiations, in order to remain responsive to changing conditions and needs. 319

In addition, protected areas legislation could provide that management or co-management agreements and conservation agreements with indigenous peoples and local communities include the use of traditional mechanisms for compliance, dispute settlement and mediation where community members are involved before formal court proceedings are initiated, depending on the seriousness of the offence. Some countries have such a provision in their legal framework, for example, Fiji (see Box III(1)-2, above). 320

In the case of voluntary conservation initiatives, legislation should also provide that where the communities or individuals involved request external assistance from the relevant enforcement agencies of the government, such agencies have the duty to provide assistance promptly and efficiently. This could include assistance in criminal proceedings that communities are unable or not empowered to deal with themselves. 321

10.2 Authorized officers

- 322 A prerequisite for effective protected areas legislation is the provision of adequate enforcement duties and powers. These provisions must include three primary elements: first, defining who is an authorized officer for the purposes of protected areas; second, defining the functions, duties and powers of such officers with respect to enforcement; and, third, defining an appropriate role for outreach and education as an extension of the services of authorized officers to promote compliance and support enforcement.
- 323 **Define ‘authorized officer’.** Protected areas legislation should include a clear definition of ‘authorized officer’ for the purposes of enforcement. The definition should include, to the extent possible and appropriate, existing enforcement services (such as police, customs or coast guards) as well as officers who may be so appointed from the protected areas authority (for example, park wardens and rangers) and, as appropriate, from local communities. In most countries, existing enforcement services such as the police and customs will be defined and governed by other legislation and, as appropriate, those enforcement services are referenced by their associated legislation.
- 324 Providing a definition for ‘authorized officer’ is important to avoid ambiguity and confusion, to inform the public about the legal powers of various officers, and to be clear that existing enforcement services have enforcement authority under the protected areas law. The appointment of special enforcement officers (parks or community wardens or guards) not already part of an existing enforcement agency should be by the minister in charge or equivalent high-level authority, and jointly with the head of the police where the appointment includes police powers. The conditions of appointment of these officers should include having completed successfully all training necessary to carry out the enforcement powers identified in the officer’s instrument of appointment. Training in enforcement rules, legal procedures and the preparation of evidence for court cases should also be provided to community members recognized as authorized officers for those purposes.
- 325 The legislation should require that each authorized officer, when acting in the performance of his or her duties, should carry and produce, upon request, identification that he or she is an authorized officer under the protected areas law. This requirement helps inform and protect the public, and protect the officer. Means of identification may also include a uniform, special badge, hat or other type of identifying apparel, which is particularly helpful for the public to recognize the authorized officers. However, the requirement for a uniform and its design should be left to the protected area authorities, as part of their administrative decision making according to the resources available and what will best serve the programme.
- 326 **Public service status.** Authorized officers should have the status of public servants when acting in the performance of their duties under the law. This status is critical to protect them from liability for actions performed in the course of their duties. It adds legitimacy to their work and conveys to the public the legality of the performance of their duties. This status may also help protect officers from physical or verbal abuse or violence while they are performing their duties. Without public servant status, the effectiveness of the officer’s work may be seriously weakened, particularly when apprehending a violator outside the protected area or presenting evidence in a legal proceeding. Public servant status for the authorized officer should apply whether the protected areas authority responsible is a governmental body or a statutory corporation of the government.
- 327 **Community and private guards for voluntarily conserved areas.** In the case of voluntarily conserved areas, the conventional application of ‘authorized officer’ is worth expanding. Indigenous and local communities undertaking voluntary conservation initiatives may have community officers who handle local enforcement actions and are recognized and respected by the community in this role. For example,

the WaiWai indigenous people of Guyana have created a protected area over their entire land. Under the Amerindian Act 2006, the WaiWai have the power to make and enforce legally binding rules in order to safeguard their protected area. Private landowners with PPAs may have special arrangements where staff or contractors help to monitor and patrol the area. The entities involved may have an interest in continuing to use these individuals in an enforcement or compliance role once a voluntarily conserved area becomes part of the formal protected areas system. Such special arrangements may be noted in management and other agreements being negotiated to bring the site into the formal system. Where such new governance approaches are anticipated, the legislation should define ‘authorized officer’ to include community-appointed guards, private guards or other appointments agreed between the parties concerned.

Where community officers are involved, conditions of appointment, training and other matters may need modification to be appropriate for existing community arrangements and responsive to cultural values. In all cases, however, the general safeguards available to authorized officers to protect against external threats and liability in the performance of their duties, including public service status, should also be available to community officers. 328

Negotiate cooperative agreements with other enforcement agencies. When outlining legislative provisions on enforcement, a primary consideration for the legal drafter is to identify enforcement resources within existing enforcement services. The police should be among the first enforcement services to be involved because of their official status in criminal law, powers of arrest, and experience collecting and preserving evidence for court proceedings. Other important professional service units to consider for enforcement support include officers who are regularly in the field, may work in the vicinity of protected areas and be acquainted with local terrain and user communities (for example, forestry officers, wildlife officers, fisheries officers, development control officers, the coast guard, customs inspection officers or national guard officers). 329

In addition, the legislation should provide the protected areas authority general powers to enter into cooperative agreements with other agencies for services (enforcement, training, use of equipment for surveillance and monitoring). Training of protected areas staff for enforcement functions is particularly important. In many countries, protected area expertise at the site level may not be primarily in enforcement but rather in managing or maintaining the protected area, or serving as visitor guides or scientific and technical experts to help interpret the natural and cultural values of the protected area, or providing other visitor interpretation services. 330

Appointments from local authorities. In many countries, local government authorities (for example, municipalities, incorporated communities) appoint their own officers for local enforcement. Consistent with established legal practice, protected areas legislation should provide for enlisting such local government officers as part of enforcement and compliance programmes for both terrestrial and marine protected areas. 331

Provisions could authorize the minister in charge, working with local authorities, to grant certain protected area enforcement duties and powers to local government enforcement officers as long as they are properly trained and qualified. Appointments should be according to the same standards and safeguards as would apply to other authorized officers appointed under the protected areas legislation, including rules for accountability and regular performance reviews. 332

The use of ‘honorary’ officers may also be authorized. The protected areas authority could have the power to appoint honorary officers with certain limited powers (likely not to involve firearms or powers of arrest), to serve in monitoring, surveillance, data management or other administrative roles related to 333

enforcement. Local community leaders, retired enforcement officers, volunteers, or individuals or groups associated with community service or conservation organizations might be suitable candidates. Local participation and support are essential for effective implementation of protected area programmes, and appointing local honorary officers may be one way to build lasting relationships with the community. When performing duties in their appointed capacity as honorary officers, these officers should also be protected by public service status. For an example of the use of honorary enforcement officers in Fiji, see Box III(1)-11.

Box III(1)-11: Honorary enforcement officers recognized in Fiji legislation

In Fiji, the appointment of community fish wardens by the Fisheries Department under section 3 of the Fisheries Act 1941 has been a key enforcement measure for locally managed marine areas:

Minister may appoint honorary fish wardens

3. The Minister may appoint honorary fish wardens whose duties shall be the prevention and detection of offences under this Act and the enforcement of the provisions thereof.

Power of examination and detention

7. (1) Any licensing officer, police officer, customs officer, honorary fish warden and any other officer empowered in that behalf by the Minister, may, for the purpose of enforcing the provisions of this Act:-

- (a) require any person engaged in fishing to exhibit his licence, apparatus and catch;
- (b) go on board any vessel reasonably believed to be engaged in fishing and search and examine any fishing apparatus therein;
- (c) where there is reasonable suspicion that any offence has been committed, take the alleged offender, the vessel, apparatus and catch, without summons, warrant or other process, to the nearest police station or port. The vessel and apparatus may be detained pending trial of the offender and the catch may be sold and the proceeds of the sale detained pending such trial; and thereafter any vessel, apparatus or money so detained shall, unless forfeited under the provisions of subsection (7) of section 10, be returned to the person from whom the same was taken.

(2) Any person who refuses to permit any officer or person mentioned in subsection (1) to board a vessel or obstructs or hinders him in the course of boarding a vessel or in the course of otherwise executing his duties shall be liable to a fine not exceeding one hundred dollars or to imprisonment for a term not exceeding six months.

Source: Fisheries Act 1941, ss. 3, 7.

10.3 Powers and duties of authorized officers

334 The primary responsibility of authorized officers is to safeguard the resources of a protected area, and to ensure the safety of visitors and others authorized to use the area. In all situations, the principles of good governance need to be built into the responsibilities and functions of authorized officers for the protected area.

335 The responsibilities of authorized officers (whether police, customs officials, park wardens or rangers) take a variety of forms, depending on the needs of the protected area and the skills and strengths of the officer. Common enforcement powers include standard police powers to stop, search and arrest in accordance with the criminal code and rules of criminal procedure. Some authorized officers will have full police powers, including powers of arrest, or limited police powers, for example, to stop and question suspected offenders. Some authorized officers will not have police powers but may be appointed for visitor interpretation, education and training, and other tasks such as crowd control and visitor management during high-use periods or special events. Key powers associated with these different roles are briefly discussed below.

10.3.1 Police powers

Generally, enforcement services (including the police forces, coast guard and customs) have a number of standard enforcement powers under criminal law because they serve as the main enforcement arm of a jurisdiction and are charged with the fundamental duties of protecting persons and property. When the appointment of rangers, wardens and other protected area officers includes a law enforcement role, this normally involves police powers to enforce national laws as well as protected area laws and regulations. In some countries, rangers or wardens patrolling protected areas may be armed and may work to prevent poaching and other serious criminal activities. Authorized officers with law enforcement powers need training by the police or other enforcement services and should be certified to perform this role. 336

The legal drafter should consult with police and justice officials, to agree on police powers that might be extended to protected area officers authorized under the protected areas law. In many jurisdictions, only the police or other official law enforcement officers may hold full police powers, including the power to carry firearms. Increasingly, however, there is recognition that some powers should be extended to other trained and properly appointed officers, especially where the police are already overextended and the area to patrol and oversee is large and scattered, spanning broad expanses of land or sea. 337

Basic police powers normally include the power to stop and detain any person for a reasonable time without a warrant under either of two situations: (1) when an officer sees the person doing an act, or (2) when an officer has reasonable grounds to believe the person has done an act. In either case the act in question is an offence under the law. When one of these situations arises, the police normally have the power to require the detained person to provide his or her full name and address and to produce for inspection a licence, permit or other appropriate document. These powers might be extended to other authorized officers working directly with the protected areas authority, to the extent that they are trained and so appointed. 338

The next level of police powers concerns the power to stop, search, seize items and arrest individuals. This includes powers to: 339

- (a) enter and search any land, building, premises or possession of a person, provided that no dwelling may be entered or searched without a warrant;
- (b) stop, detain and search any vehicle or other craft or conveyance which appears to have been used or is being used in the commission of an offence under the legislation;
- (c) seize any vehicle, craft, conveyance, weapon, trap or device of any kind which appears to have been used or is being used in the commission of an offence under the legislation;
- (d) seize any animal, plant or product, or part thereof, which appears to be possessed in contravention of the law;
- (e) arrest any person the authorized officer has reasonable grounds to believe has committed an offence, and take such measures as are reasonably necessary to make the arrest.

To protect an authorized officer with full or partial police powers, the legislation should also specify that, when acting in good faith as an officer and in accordance with their appointment, nothing done by an authorized officer will be construed as an offence against the law. 340

10.3.2 Other powers

Other powers and duties of authorized protected area officers are more varied and diverse. In many countries, protected area officers (whether called managers, rangers or wardens, or known by another 341

appropriate title) have no or limited law enforcement authority and do not carry firearms. Instead, they have powers and duties associated with the operation and management of the protected area and with building good relationships with local communities and the visiting public.

342 There are several roles for protected area officers, apart from police powers discussed above, that are worth recognizing in protected areas legislation or associated regulations or operational rules. Key roles include:

- **Interpretation and education.** Protected area officers often provide a wide range of information services to visitors and the community. Some may be engaged in interpretive programmes to foster stewardship of resources. Interpretation may include tours and talks about the protected area's ecology and history. Officers may also play a more formal role in education programmes, supporting and complementing instruction received by students in academic settings. In these roles, the officers are expected to be experts in the resources under their care, whether natural or cultural.
- **Emergency response.** Protected area officers are often trained in first aid, and participate in search and rescue because they are most familiar with the areas under their care.
- **Firefighting.** Some officers may be trained for firefighting in wilderness or other protected areas because they are often the first to spot fires. They also enforce laws and regulations regarding campfires and other fires in protected areas.
- **Guarding.** Some officers may be responsible for ensuring that gates are locked, that closed areas are not used and that unauthorized persons are kept out of closed or sensitive areas.
- Other duties associated with administration include serving as **dispatchers** (responding to emergency calls and dispatching assistance), performing routine **maintenance** on facilities or equipment, and carrying out **administration** tasks (budgets, human resources).

10.3.3 Combining extension with enforcement

343 By the nature of their role, authorized protected area officers are in contact with local communities and involved in outreach and education. These opportunities could be used to build awareness and develop good relations with local communities, both for specific protected areas and issues affecting these areas from time to time as well as to foster good conservation practices in general. Protected areas legislation could include and promote community outreach as one of the duties of authorized officers. Provisions could encourage public outreach training for protected area officers charged with enforcement responsibilities so that, in the course of performing these duties, officers may take advantage of opportunities to help local communities comply with the law and understand the benefits of protected areas.

344 Authorized protected area officers working on the front lines with police powers or in other roles also become ambassadors for the protected area because they are frequently the persons most in contact with local communities. They have an opportunity to influence, in a positive way, local perceptions of and understanding about the protected area. It is especially important that officers view themselves as educators as well as enforcers, and recognize this role as part of their functions. Authorized officers, especially those working within and with communities on a daily basis, may also be very effective in helping to promote compliance and self-enforcement through education on the value of the legislation and specific rules. They may be in a position to solicit assistance from local communities in specific matters, for example, in reporting on the possible local introduction of IAS or IAS outbreaks, and undertaking, monitoring and implementation of measures for IAS prevention and control, and emergency preparedness.

Legislative provisions dealing with the outreach and extension responsibilities of authorized officers should also encourage efforts to identify and promote local knowledge about sustainable use practices, including local customary or traditional practices. 345

10.4 Offences and penalties

Offences under protected areas legislation are those actions that violate provisions of the law or contravene regulations governing activities covered by the law. Offences and penalties under protected areas legislation are normally applied within the broader framework of the country's criminal code, civil law and rules concerning jurisdiction of the courts. The discussion below should be read in that context. 346

Criminal law, sometimes called penal law, refers to those rules where the common characteristic is the potential for severe punishment, which may include imprisonment, government supervision (parole or probation) and significant fines, depending on the offence. A defendant in civil litigation is never incarcerated. Instead, the remedy is a civil fine (sometimes called money damages), which may be minor or substantial. The fine is generally determined by the cost of recovery from the harm done and, in many cases, punitive damages are added to punish or make an example of the defendant. A key purpose of civil penalties in protected areas legislation is to reimburse the plaintiff (the party claiming harm) for losses caused by the defendant's behaviour and to restore, to the extent possible, environmental features that may have been damaged. 347

The legal drafter should give careful attention to provisions on criminal and civil penalties for offences in the context of protected areas legislation. Other laws may also apply to a particular offence, for example, with respect to pollution control, EIA, or the introduction, prevention or control of IAS. Subject to legal practice, such laws may be cross-referenced in the protected areas legislation. 348

The discussion below reviews general considerations that are important for the legal drafter to keep in mind in protected areas legislation with respect to criminal penalties, civil penalties, burden of proof and associated legal proceedings. 349

10.4.1 Criminal penalties

Offences under protected areas legislation are normally governed by the criminal code. The first consideration is to be consistent with the criminal code and its rules on penalties, process and court jurisdiction. In some countries, the relevant sections of the criminal code are cross-referenced for general principles or specific sections, including principles of strict liability (where fault or intent need not be proven; see section 10.4.3, below), that may apply. A number of considerations are important for the legal drafter to keep in mind with respect to provisions on criminal penalties. 350

Be clear about the offence. Penalties for offences relate to prohibited and controlled activities indicated in the protected areas law. Provisions on offences and penalties should be clear, citing the section which specifies the activity being regulated and which, if violated, becomes an offence. The range of penalties appropriate to the harm caused should be adequate to cover the range of violations that may fall within that provision. This range may be dictated by the juridical rules on which courts handle different cases depending on the case and its severity, as well as rules on limits for summary conviction compared to conviction by indictment, where applicable. Providing an appropriate range of offences gives the courts the discretion to match the penalty to the seriousness of the offence. 351

352 **International standards may apply.** In some situations, countries may be guided by standards or recommendations from international organizations or regional law. In Europe, for example, the EU Directive on the Protection of the Environment through Criminal Law (2008) defines protected area offences and penalties under criminal law. The Directive provides:

Article 3: Offences

Member States shall ensure that the following conduct constitutes a criminal offence, when unlawful and committed intentionally or with at least serious negligence: [...]

(h) any conduct which causes the significant deterioration of a habitat within a protected site; [...]

Article 5: Penalties

Member States shall take the necessary measures to ensure that the offences referred to in Article 3 and 4 are punishable by effective, proportionate and dissuasive criminal penalties (emphasis added).

353 **Balance deterrence with the need for social acceptability.** Penalties should be set to serve as a true deterrent to the offence rather than simply be symbolic with no force. At the same time, it should be borne in mind that where penalties are set at unreasonably high levels, they become socially unacceptable and thus difficult to enforce. In this regard, there is ample evidence that judges do not impose penalties if they are perceived to be draconian in a given national or local context, or set fines that are unreasonable and outside the means of the communities concerned. For this reason, a balance should be found between the need to deter offences and the social acceptability of penalties. This requires weighing the seriousness of the offence as well as the local conditions in which it is committed.

354 **Keep penalty schedules updated.** Subject to legal practice, the range of fines set in the legislation or the specific fine identified for a particular offence might be tagged to a floating standard, for example, inflation, so that over the years the penalty will remain a relevant deterrent in contemporary social and economic conditions. Some countries call these 'penalty units' (see, for example, the Australia case study accompanying these guidelines: Boer and Gruber, 2010a). Penalties may be provided in a schedule to the legislation so that, when updating is needed, only the schedule needs to be amended.

355 Tools to keep penalties updated are essential as a deterrent and for effective enforcement. A fixed penalty frozen in principal legislation may quickly become outdated, should circumstances change or the value of certain resources increase. A classic example is the taking of specimens of plants and animals of potentially high commercial, pharmaceutical or industrial value. If specimens have been collected in a protected area for the purpose of resale or commercial exploitation, the courts should have the flexibility to set fines or imprisonment based on evidence presented concerning the international market value of the specimen or the degree to which the species is endangered, and not be restricted to general penalty clauses in domestic legislation that may not have envisioned this type of crime and its commercial value.

356 **Penalties to match seriousness of environmental harm.** Provisions on offences normally provide for a range of penalties appropriate for the severity of the offence, as judged by the harm caused to the protected area. The type and severity of the penalty for each offence should relate, in particular, to the ecological or biodiversity damage done and, where relevant, to associated cultural property damage. Importantly, the penalty imposed should reflect the degree of threat to the viability of the area and its ability to recover, the irreversibility of the effect, and the conservation values and objectives of the area. For example, killing or injuring an endangered or threatened species in a protected area should be characterized as a serious offence and carry a high penalty. Destroying or disturbing critical habitat for an endangered or threatened species should also be a serious offence. Causing physical damage to or polluting an internationally designated site should be among the most severely penalized offences, subject to the degree of damage, and may also be subject to rules on strict liability (see section 10.4.3,

below). Redirecting water flows or otherwise causing damage to ecosystems (watersheds, wetlands, coral reefs, estuaries) by destruction, pollution or taking vegetation, earth, coral or other natural substances from the site should be severely punished.

For acts of comparable severity, the penalty might be higher for offences committed in an area under strict protection (or one of the highest levels of conservation protection), as opposed to offences committed outside the area but affecting the area. Issues of severity and intent may be defined by the criminal code and judicial rules in a particular jurisdiction, specifying which courts are involved for which types of offences, and any appellate process applicable. 357

Subsequent offences. Where a person is convicted of an offence a second or subsequent time, the amount of the fine should be substantially higher, for example, doubled. Subject to the criminal code, the legislation should specify the time period for a second or subsequent offence (for example, within five years of the first or prior offence). In addition, the law could provide for the permanent confiscation of devices used in the commission of the offence. 358

Cumulative fines. Fines for an offence involving more than one animal, plant or object could be calculated separately for each animal, plant or object, with the offender liable to pay the total charges. Other factors influencing the level of penalties may include the persistence of the offence (the number of days the offence continues after orders to cease, for example, with pollution). Offences continuing after a notification to cease the offence has been issued could be considered a separate offence, with penalties determined according to the number of days the offence continues to be committed. 359

Confiscation. Where a person is convicted of an offence, in addition to liability for a fine or imprisonment, confiscation without compensation should be prescribed for: any objects that are the subject of the offence (including any flora or fauna taken as well as cultural objects); any proceeds from the sale of such objects; any weapon, equipment, tools, gear or device used in the commission of the offence; and any vehicle, vessel, boat, craft or means of conveyance used in the offence. (In many jurisdictions, the term used to convey the same idea is 'forfeiture'.) 360

Tickets (spot fines) for minor offences. For minor offences, a provision might be added allowing on-the-spot fines or tickets to be issued by authorized protected area officers, involving fixed penalties that could be paid in person or by post instead of appearing before the court. This tool is useful only in the case of minor offences carrying small fines and committed inside a protected area, for example, parking in a no-park zone, littering, unruly conduct inside a protected area, entering the closed part of a protected area, mooring, anchoring, fishing or snorkelling in a prohibited area, or bringing animals into a protected area. This device helps punish minor offences while being less burdensome on the offender and the courts, since payment discharges any liability that might arise in a court conviction, thus avoiding a court hearing. (The parallel in most countries is the ability of officers to issue a traffic ticket.) 361

Additional penalties. Conviction for an offence should result in the cancellation of any associated permit, licence, concession or other authorization issued to the convicted person or corporation. Depending on the severity of the offence, an application for re-issuance should not be considered for a specified period, for example, five years, or the offender may be permanently disqualified. 362

10.4.2 Civil penalties

Provisions indicating civil penalties are also important to include in protected areas legislation, either directly or by reference to other applicable legislation, as appropriate. It is increasingly recognized as good legal practice for environmental law in general, and protected areas law in particular, to 363

include provisions on civil penalties. Civil penalties help with recovery from environmental harm by reimbursing the party harmed and restoring environmental features to the extent possible. Criminal penalties involved in a successful prosecution are traditionally thought to be backward-looking. They are designed to punish a person for acts committed in the past. Civil penalties look more to the future, focusing on how a harmful action can be stopped, even as the government is deciding on criminal action, and the means whereby the damage can be repaired.

- 364 A civil penalty differs from criminal punishment because it is sought primarily to compensate the party harmed including, as the case may be, the state, rather than to punish the wrongful conduct itself. For example, if a boater dumps toxic substances into an MPA, in addition to criminal action, the state should have the right to seek recovery of clean-up and restoration costs before the appropriate law court or hearing officer. Civil litigation may be brought in addition to criminal litigation or may stand alone.
- 365 In a civil case, the remedy is a civil fine involving money damages, which may be both compensatory and punitive, and other orders that emphasize stopping the damaging activity and repairing the damage (such as requiring an area illegally cleared of vegetation to be revegetated at the expense of the liable party). The civil penalty in such cases would be a court order restraining the offender from continuing the damaging activity and requiring them to remedy the damage.
- 366 Proceedings could be taken by any person, which could be an individual or government official, or an entity with legal personality such as an NGO or an indigenous group. In civil litigation, an action against the accused may be brought by an individual, in addition to any action of the government, in order for the individual to seek compensation for harm suffered.
- 367 **Specific civil penalty provisions.** Specific provisions in protected areas legislation with respect to civil penalties, in addition to criminal penalties, may relate to the following:
- **Cost of environmental restoration or recovery.** Where a wrongdoing results in the need for clean-up operations or restoration, the civil penalty order of the court, in addition to a fine for the wrongdoing, may direct payment of such sums of money as it determines necessary for restoration, rehabilitation or clean-up associated with the damaged site. Alternatively or in combination, the court may order the civil defendant to undertake clean-up operations directly. This would be a common and necessary option where the harm caused by a corporation (for example, the release of toxic chemicals used in its operations) requires the corporation's special knowledge and expertise for proper clean-up and disposal.
 - **Community service orders.** The offender might be assigned a term of community service toward the restoration, rehabilitation or clean-up of the damaged site, service work, or other general tasks associated with the protected area. Generally such orders are based on recommendations of the protected area authorities, related to the offence where relevant, and subject to the skills of the offender.
 - **Combination of remedies.** In some cases, a civil penalty may be supplemented by other legal remedies, including administrative sanctions, such as the suspension or cancellation of a licence or permit. Undertaking the activity once the licence or permit has been suspended or cancelled may lead to a criminal offence, thus combining civil and criminal penalties. In some cases, especially those related to public safety, authorities may revoke a permit or licence and seek an injunction or other appropriate relief to stop or remove the activity, in addition to seeking a civil penalty.
- 368 **Third-party lawsuits.** An important principle of civil law is that it may also be enforced by private persons. Such action is commonly referred to as a third-party lawsuit. Increasingly in civil proceedings, the law is giving third parties the right to make a legal claim or to seek judicial enforcement of a duty or right for which the government normally has lead responsibility. Depending on the jurisdiction, such

action may be brought by individuals, NGOs or corporations. Where successful, parties bringing such civil suits are normally able to recover legal costs associated with the suit.

Subject to local rules, protected areas legislation should recognize the standing of third parties to make claims with respect to matters covered by the legislation. For example, the Pacific Island of Niue's Environment Act 2003 provides: 369

Without prejudice to the power of the Court to strike out vexatious proceedings, any person may bring proceedings in the High Court for an order to remedy or stop a breach of this Act, whether or not any right has been, or may be, infringed as a result of that breach (s. 18; emphasis added).

Civil actions may be very effective in helping to ensure enforcement of the law and accountability of the decision maker responsible for carrying out the requirements of the protected areas legislation (see Box III(1)-12). 370

10.4.3 Burden of proof

Burden of proof in legal proceedings relates to a party's duty to prove a crime (under criminal law) or a charge of harm (under civil law). The level of proof required in a legal action to discharge this duty depends on the standard of proof involved. The issue of burden of proof applies to both criminal and civil law. Generally, the legal drafter should consider the appropriate levels of guilt for criminal offences or fault for civil wrongdoings and indicate these in the legislation rather than leaving such decisions to the courts. These provisions, which are subject to the criminal and civil codes, as the case may be, are particularly important where the intent is to apply strict liability or to shift the burden of proof to the accused. 371

Standards of proof vary. There is a major difference between criminal and civil litigation with respect to the standard for proving guilt of the accused (criminal law) or fault of the accused (civil law). Because potential penalties are comparatively severe in criminal litigation, the burden of proof is high and normally rests entirely on the state. The government must prove that the defendant is guilty, normally 'beyond a reasonable doubt'. Defendants are assumed to be innocent and are not required to prove their innocence. Litigation may be costly and time-consuming for the government if the evidence is weak or if the accused has the resources to pursue a full appeals process. 372

In civil litigation, because civil penalties are only monetary, the government has a lower standard for proving fault. This standard focuses on the preponderance of the evidence. For example, if it is determined that there is more than a 50 per cent probability that the accused caused the harm, the government prevails. It is normally less costly to bring civil litigation and civil actions are usually processed more quickly. For these reasons, authorities may first choose to proceed with a civil action, even though criminal action may follow. 373

In criminal litigation, there are a number of technical situations where the burden of proof may shift to the accused. Minor offences (misdemeanours, small fines, for example, for traffic violations) may trigger a reversal of the burden of proof. Where feasible, a provision might be included in the protected areas legislation whereby the burden of proving a fact related to a minor charge rests with the person charged. For example, a person caught with a fish in a no-take zone is presumed to have taken the fish from that zone. Or a person caught in possession of a protected species inside a protected area is presumed to have taken it from the area. Similarly, when a person is found inside a protected area where entry is prohibited, or is found with a toxic or harmful substance in their possession or control near a spill of the same substance, the evidence on its face may be sufficient to shift the burden of proof to the accused, who must then prove innocence. 374

Box III(1)-12: Third-party enforcement provisions in Australia

Nature protection legislation in Australia specifically provides for third-party actions:

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

475 Injunctions for contravention of the Act

Applications for injunctions

(1) If a person has engaged, engages or proposes to engage in conduct consisting of an act or omission that constitutes an offence or other contravention of this Act or the regulations:

- (a) the Minister; or
- (b) an interested person (other than an unincorporated organisation); or
- (c) a person acting on behalf of an unincorporated organisation that is an interested person;

may apply to the Federal Court for an injunction. [...]

Meaning of interested person—individuals

(6) For the purposes of an application for an injunction relating to conduct or proposed conduct, an individual is an **interested person** if the individual is an Australian citizen or ordinarily resident in Australia or an external Territory, and:

- (a) the individual's interests have been, are or would be affected by the conduct or proposed conduct; or
- (b) the individual engaged in a series of activities for protection or conservation of, or research into, the environment at any time in the 2 years immediately before:
 - (i) the conduct; or
 - (ii) in the case of proposed conduct—making the application for the injunction.

Meaning of interested person—organisations

(7) For the purposes of an application for an injunction relating to conduct or proposed conduct, an organisation (whether incorporated or not) is an **interested person** if it is incorporated (or was otherwise established) in Australia or an external Territory and one or more of the following conditions are met:

- (a) the organisation's interests have been, are or would be affected by the conduct or proposed conduct; [or]
- (b) if the application relates to conduct—at any time during the 2 years immediately before the conduct:
 - (i) the organisation's objects or purposes included the protection or conservation of, or research into, the environment; and
 - (ii) the organisation engaged in a series of activities related to the protection or conservation of, or research into, the environment; [or]
- (c) if the application relates to proposed conduct—at any time during the 2 years immediately before the making of the application:
 - (i) the organisation's objects or purposes included the protection or conservation of, or research into, the environment; and
 - (ii) the organisation engaged in a series of activities related to the protection or conservation of, or research into, the environment.

National Parks and Wildlife Act 1974 (New South Wales)

176A Restraint etc of breaches of Act

(1) Any person may bring proceedings in the Land and Environment Court for an order to remedy or restrain a breach of this Act, whether or not any right of that person has been or may be infringed by or as a consequence of that breach.

(2) Proceedings under this section may be brought by a person on the person's own behalf or on behalf of the person and other persons (with their consent), or a body corporate or unincorporated (with the consent of its committee or other controlling or governing body), having like or common interests in those proceedings.

(3) Any person on whose behalf proceedings are brought is entitled to contribute to or provide for the payment of the legal costs and expenses incurred by the person bringing the proceedings. [...]

Source: EPBC Act, s. 475; National Parks and Wildlife Act 1974, s. 176A.

Strict liability. Strict liability may apply to both criminal and civil offences. Strict liability allows a person to be held responsible for damage or loss caused by their acts or omissions regardless of fault in a civil case, and regardless of intent in a criminal case. Many countries apply the concept of strict liability under criminal law for certain environmental offences particularly where the environmental crime is very serious.

375

For example, Australia's federal Environment Protection and Biodiversity Conservation Act 1999 provides strict liability for criminal offences in declared world heritage sites (s. 15A) and declared Ramsar wetlands (s. 17B) (see Boer and Gruber, 2010a). In Canada, offences and punishment provisions in the Oceans Act 1996 are also in line with the strict liability approach (see the Gully case study accompanying these guidelines: VanderZwaag and Macnab, 2010). When strict liability is imposed, the evidentiary burden changes so that the defendant must prove innocence rather than the prosecution proving guilt beyond reasonable doubt.

376

Box III(1)-13: Corporate liability in New South Wales, Australia

The National Parks and Wildlife Act 1974 (New South Wales) includes both corporate liability and corporate officer liability provisions:

175A Offences by directors or managers of corporations

- (1) If a person contravenes any provision of this Act or the regulations:
- (a) while acting in the capacity of a director, a person concerned in the management, or an employee or an agent, of a corporation, or
 - (b) at the direction or with the consent or agreement (whether express or implied) of such a director, person, employee or agent,

the corporation shall be taken to have contravened the same provision.

(2) A corporation may be proceeded against and convicted under a provision pursuant to subsection (1), whether or not the director, person, employee or agent has been proceeded against or convicted under that provision.

(3) Nothing in this section affects any liability imposed on a person for an offence committed by the person against this Act or the regulations.

175B Offences by corporations

(1) If a corporation contravenes, whether by act or omission, any provision of this Act or the regulations, each person who is a director of the corporation or who is concerned in the management of the corporation is taken to have contravened the same provision, unless the person satisfies the court that:

- (a) the corporation contravened the provision without the knowledge (actual, imputed or constructive) of the person, or
- (b) the person was not in a position to influence the conduct of the corporation in relation to its contravention of the provision, or
- (c) the person, if in such a position, used all due diligence to prevent the contravention by the corporation.

(2) A person may be proceeded against and convicted under a provision pursuant to this section whether or not the corporation has been proceeded against or been convicted under that provision.

(3) Nothing in this section affects any liability imposed on a corporation for an offence committed by the corporation against this Act or the regulations.

(4) Without limiting any other law or practice regarding the admissibility of evidence, evidence that an officer, employee or agent of a corporation (while acting in his or her capacity as such) had, at any particular time, a particular intention, is evidence that the corporation had that intention.

Source: National Parks and Wildlife Act 1974, ss. 175A, 175B.

Where possible, it is important for the legal drafter to specify what fault level should apply in particular cases. For example, the Cook Islands Environment Act 2003 provides: "Every person commits an offence who [...] *threatens or disturbs* any animal or plant of the protected species of any such animal or plant or *the habitat*" (s. 55(1); emphasis added). This could be interpreted to mean that persons will

377

commit the offence even if they did not realize that their actions were disturbing protected animals or plants. Such an interpretation would depend on legal precedent and principles provided in the criminal code. In some jurisdictions, this will be understood to be strict liability (liability that does not depend on intent to harm but is based on the breach of an absolute duty). To avoid uncertainty, it is advisable to be explicit in the legislation when strict liability is intended.

378 **Corporate liability.** Depending on the wrongdoing, corporations and businesses are normally liable for higher civil penalties in terms of monetary damages than individuals. This may need to be expressly indicated in the legislation. Officers of corporations should also be criminally liable to prosecution and punishment according to the offence. In countries that do not have broad corporate liability in their general criminal law, this is an important provision to include in the protected areas law (see Box III(1)-13 for an example of language from New South Wales, Australia).

10.4.4 Legal proceedings

379 Rules on the use of police powers by authorized officers and associated court proceedings are normally subject to the criminal code. Specific provisions important for the purposes of enforcement in protected areas could be articulated in the legislation to give emphasis, as long as they are in accordance with and subject to the criminal code. A number of principles may be useful to recognize. It is advisable to make a general reference to the criminal code or to the specific provisions of the code, as relevant. Rules that may be worth mentioning in protected areas legislation include the following:

- (a) Persons who obstruct authorized officers, knowingly make false statements or aid in the commission of an offence would also commit an offence and be liable for penalties.
- (b) The main conditions in which a warrant is required for an authorized officer to exercise arrest, search and seizure powers, and situations in which a warrant is not necessary, could be summarized or referenced to relevant sections of the criminal code.
- (c) Any person arrested pursuant to the protected areas legislation should be taken as soon as practicable before the proper court to be dealt with according to the law.
- (d) Any seized item, whether flora, fauna or any other object used in contravention of the legislation, should automatically become property held by the government to be retained by the protected areas authority or other appropriate authority designated by the government with capacity to safeguard the object, until the legal proceeding makes final disposition of the case. A provision should be included whereby protected area technical experts are consulted on the keeping of live specimens pending trial or disposal.
- (e) When seized items are part of an offence but the person charged does not appear to answer the charge, provisions should allow that after a specified interval of time the items are forfeited to the government to be returned to the appropriate protected areas authority.
- (f) If seized items are perishable or cannot otherwise be retained for the duration of court proceedings, the protected areas authority should have the power to dispose of or sell such items, and any proceeds of such disposal should be held until the court or other appropriate legal proceeding makes final disposal of the proceeds.
- (g) Authorized officers should be required to issue to any person from whom items have been seized a written receipt for items seized.
- (h) A general power to dispose of the confiscated items should be granted to the protected areas authority.

10.4.5 Administrative appeals

The right to appeal administrative decisions made pursuant to the protected areas legislation should also be provided. The procedure for such appeals may be laid out in other legislation, such as administrative law. In protected areas legislation, the right to appeal administrative decisions normally applies to decisions with environmental, social, economic, cultural or human rights implications. Such decisions could relate to the issuance of licences, permits for major concessions or construction contracts; development projects with potentially significant impacts on the protected area; or rule making on certain matters related to natural resource uses inside the protected area. 380

Subject to local legal practice, the protected areas legislation should include a general provision stating that affected parties or third parties have the right to appeal administrative decisions made under the legislation, and that rules set out in the administrative law with respect to the procedure for appeal will apply. The procedures would normally include requirements for alternative dispute resolution and mediation before the case can move into the courts. 381

Indigenous peoples or traditional communities may also have traditional conflict management mechanisms governing their internal affairs. Where appeals and civil actions involve such groups, the legislation could provide that a representative of their traditional conflict management body may participate in the proceedings. 382

11 Environmental and social impact assessment

Certain activities or projects undertaken in a protected area, or immediately adjacent to the area, will require an EIA. Operationally, an EIA normally includes an assessment of both environmental and social impacts. At the same time, activities related to maintenance may need to be exempted. It is important to clarify this distinction in any provisions on EIA that may be included or cross-referenced in protected areas legislation. The types of activities that are maintenance-related and EIA-exempt will normally be defined by the management plan or an operational work programme associated with the management plan. 383

In many countries, EIA requirements are contained in separate legislation specifically on this subject and applicable to all sectors of government activity. Where this is the case, the protected areas law should cross-reference the EIA legislation, being sure to clarify exempted work-related activities. Some EIA laws may not expressly require that an assessment be undertaken for proposed projects or other work with a potentially significant negative impact on the conservation objectives of a protected area. Or general EIA provisions may not be sufficiently tailored to the special needs of protected areas. For these reasons, the legal drafter should give careful consideration to including in the protected areas legislation provisions on EIA as a safeguard for the protected areas system, whether or not EIA requirements already exist in other legislation. 384

EIA provisions in protected areas legislation should cover issues of particular relevance for protected areas management. These provisions should state that all activities are to be screened for the application of EIA requirements, while being clear about the type of maintenance work undertaken by staff or contractors that is exempt pursuant to the management plan. 385

For activities inside protected areas, where specific EIA legislation does not exist or is inadequate, provisions may include the following: 386

- (a) Clearly require that an EIA must be prepared for any development project or management activity

which may cause significant adverse impacts to a protected area or to the protected areas system overall on a cumulative basis.

- (b) Provide a list of the types of development projects and management activities that will automatically require an EIA, for example, construction of major buildings or other physical structures; significant alteration of landscape, seascape or seabed; measures involving invasive species control; introduction of IAS; bioprospecting; or any other activities which could put at serious risk the long-term objectives of the protected area.
- (c) Authorize discretion on the part of the protected areas authority to call for an EIA even if the proposed development or activity does not appear on the list.
- (d) Authorize issuance of EIA guidelines specifically tailored to the special features and objectives of protected areas, including for screening (whether an EIA is necessary) and scoping (what an EIA should cover).
- (e) Require the EIA process to be science-based.
- (f) Emphasize the need for a specific socio-economic analysis where landowners or rightsholders may experience significant negative effects.
- (g) Require public participation in EIA screening and scoping, and in the draft EIA, and ensure public access to information in a meaningful and timely manner.

387 Where EIA requirements already exist pursuant to other legislation, provisions may include the following:

- (a) Restate that the EIA requirement applies to activities within protected areas according to procedures and standards at least as stringent as those provided in the protected areas legislation.
- (b) Require or reiterate, as appropriate, that the protected areas authority must be involved in any deliberations and decisions regarding proposals for development requiring an EIA, whether within or outside the protected area, that may significantly affect the protected area, and that such a proposal must not be authorized except (1) with the written consent of the protected areas authority, and (2) where the proposed development is compatible with the long-term objectives of the protected area and the formal protected areas system.

388 In all situations, the protected areas legislation should require that the EIA decision-making process for any project potentially affecting a protected area must apply the precautionary principle in order to ensure and safeguard the long-term objectives of the protected area and the formal protected areas system. The provision should be clear that this application extends to the design of mitigation measures that may be required if the project is authorized, monitoring the project if authorized, and assessing cumulative impacts over time of the project under review with other existing or proposed projects (for further guidance, see IUCN-WCPA, 2007b).

389 **Special CBD guidance for indigenous and local communities.** In 2004, the CBD Conference of the Parties adopted the Akwé: Kon Voluntary Guidelines on how to take into account the knowledge, innovations and practices of traditional peoples as part of environmental and social impact assessment processes (SCBD, 2004a). This was in recognition of the fact that indigenous and local communities are guardians of a significant portion of the planet's terrestrial biodiversity. The Akwé: Kon Guidelines are intended to be applied in conjunction with guidelines for incorporating biodiversity-related issues into EIA. Consistent with these guidelines, protected areas legislation should indicate that special EIA and related social impact assessments with respect to the impact on indigenous and local communities should be undertaken, following international guidelines, where a proposed development may have a significant adverse effect on protected areas with lands and waters traditionally used by indigenous and local communities.

12 Special financial tools

There is broad agreement among conservation professionals worldwide that current spending on protected areas is grossly inadequate to meet the needs of existing protected areas and to expand coverage to achieve international goals for biodiversity conservation. Two principal financial mechanisms have been traditional means of support for protected areas and they remain central to the future of protected area systems. First, government budgets have been and continue to be essential for core financing. Second, revenues generated by protected areas, especially from tourism and other user fees, are important to return to the protected areas system for its use. 390

In addition, new and innovative financial mechanisms for protected areas are increasingly being explored for their potential to strengthen, expand and sustain the funding base. Protected areas legislation should recognize the full range of financial options that may be feasible in the jurisdiction involved. New financial mechanisms are normally under the jurisdiction of other legal frameworks, mainly related to fiscal policy. Where opportunities arise, it should be clear that an appropriate protected areas authority has the power to pursue their use. In that context, a range of mechanisms could be authorized for use, including accepting direct donations, undertaking cost and benefit sharing, and developing market-based approaches to generate resources for special conservation funds. 391

IUCN guidelines have assessed these mechanisms according to sources of funds and how they are raised (Emerton et al., 2006). The guidelines examine issues related to promoting donor support, generating funds through fiscal incentives, and generating funds through charges for goods and services, and these are briefly discussed below. 392

External sources of funds. Financing from funds external to the protected area (other than government budgets) may come through private voluntary contributions, environmental funds and, for many developing countries, through foreign assistance and debt-for-nature swaps. With government resources continuing to be limited, private voluntary donations have gradually increased in recent years. Protected areas legislation should give protected area authorities the power to carry out fund-raising and accept private donations for protected areas under such specified conditions as may be required from fiscal law and policy. 393

Private donations are channelled through philanthropic foundations or may come directly from corporations or individuals. While this area of fund-raising has the potential to be more flexible than direct government funding, such funds are sometimes tied to specific missions, locations or species. In addition, securing and managing such funds is time-consuming and may require special expertise in grant-writing and financial reporting which protected areas authorities may not have. 394

Environmental funds. Environmental funds, including environmental trust funds, are an increasingly useful and popular tool for special financing. Environmental funds are the main mechanism for attracting and administering external funds. They provide a way to manage funding and maintain accounts separate from general revenues. Such funds are typically established in conjunction with fund-raising and, in particular, when receiving a large contribution from a donor agency or NGO. Frequently, a condition of receiving a large donation is the establishment of a special environmental fund, and verification that an appropriate accounting and bookkeeping system has been put in place for its administration. Once established, the fund may be supplemented by other contributions from private donations or by revenues generated through the sale of protected area goods and services, as long as consistent with rules on use of the fund. 395

396 As explained in IUCN guidance on sustainable financing for protected areas, there are several different types of environmental funds (Emerton et al., 2006). One type is an endowment fund, where only the income on the capital may be spent. This type, in principle, has the greatest long-term potential for financial sustainability. In practice, it is not a good option where the capital is small, few opportunities exist to significantly grow the fund over a reasonable time frame and monies are needed in the near-term to maintain certain activities. A good use of this type, however, is when a large donation is received or the institution has the capacity to bring in a steady stream of significant donations or other monies that can quickly build to an amount of principal where the income is sufficient to meet anticipated needs. Under such circumstances, an endowment fund assures a steady stream of income on a sustainable basis, while preserving the principal to ensure that the fund is able to generate some revenue for the programme indefinitely into the future.

Box III(1)-14: Australia's National Parks Fund

Australia's Environment Protection and Biodiversity Conservation Act 1999 specifies what funds can be directed to the National Parks Fund and how they can be applied. The funds available to the Director of Parks are as follows:

514S Payments to Australian National Parks Fund

The following amounts are to be paid into the Australian National Parks Fund:

- (a) any money appropriated by the Parliament for the purposes of the Department and allocated by the Secretary for the management of Commonwealth reserves or conservation zones;
- (b) the proceeds of the sale of any property acquired out of money standing to the credit of the Fund;
- (c) any amounts paid to the Director in respect of leases, licences, permits and other authorities granted by the Director in relation to Commonwealth reserves or conservation zones;
- (d) any other amount paid by a person to the Director if:
 - (i) payment of the amount into the Fund would be consistent with the purposes for which the amount was paid; and
 - (ii) the Minister administering the Commonwealth Authorities and Companies Act 1997 considers it appropriate that the amount should be paid into the Fund;
- (e) any charges paid under section 356A or section 390F;
- (f) any other money received by the Director in the performance of his or her functions.

514T Application of money

- (1) The money of the Australian National Parks Fund may be applied only:
 - (a) in payment or discharge of the costs, expenses and other obligations incurred by the Director in the performance of the Director's functions; and
 - (b) in payment of any remuneration, allowances and compensation payable under this Division or Division 4 of Part 15.
- (2) Subsection (1) does not prevent investment of surplus money of the Fund under section 18 of the *Commonwealth Authorities and Companies Act 1997*.

Source: EPBC Act, ss. 514S, 514T.

397 Another type of environment fund might be characterized as a 'sinking' fund. Here, monies are drawn down over a period of time until the fund is liquidated. This may be an option required by some donor agencies or organizations in order to be able to monitor and track the fund separately. A third type might be characterized as a 'revolving' fund. This is the most typical and practical type of fund used by protected area authorities. It is designed to receive monies from various sources and to spend these funds as needed, consistent with the purposes and procedures involved in managing and administering the fund.

398 Subject to restrictions from the finance ministry on this option, protected areas legislation should include provisions recognizing an existing environmental fund or providing the authority to create an

environmental fund for the national protected areas system, to be managed by the lead protected areas agency. These provisions should give direction on which monies the fund may contain and how the fund is to be used. Box III(1)-14 provides an example from Australia on legal provisions related to that country's National Parks Fund.

Incentives for conservation. Individuals, groups, communities and corporations may become more interested in supporting protected areas when economic incentives encourage such activities. Economic incentives involve the use of fiscal instruments, mainly taxes and subsidies, to influence individual, community and corporate behaviour in support of protected areas and biodiversity conservation, including setting aside areas for conservation. Use of these instruments has been growing in recent decades. Their focus may not necessarily be on a protected area itself, but on changing behaviour through taxes and subsidies to reduce environmentally detrimental activities and activities that undermine protected areas, with the revenues generated being applied in part to protected area operations. 399

Where feasible, protected areas legislation should include provisions on incentives to encourage and assist private and corporate landowners, and community landowners and rightsholders to pursue voluntary conservation commitments on lands outside the formal system that support the conservation goals of the system, including lands that may serve as buffers and corridors for connectivity conservation. These commitments may include near- or long-term conservation easements or simply agreeing to undertake land management practices that are beneficial to wildlife and biodiversity conservation. Incentives may include technical assistance with the management of such property for conservation in ways supportive of the protected areas system. Where feasible, provisions on such technical assistance might be included in the protected areas legislation. Other incentives for conservation on private or communal lands may involve providing fiscal incentives (for example, tax deductions) which would normally be outside the scope of protected areas legislation and require collaborative action under legislation dealing with fiscal policy. 400

Market-based charges for goods and services. This source of funding comes from such market-based mechanisms as tourism charges, resource extraction fees and payments for ecosystem services. Tourism charges are not a new tool but many protected areas charge very low entry and recreational fees, with earnings insufficient to cover the cost of protecting the resource or providing visitor facilities. Meanwhile, some protected areas charge no fees at all. Surveys have shown that international visitors would be willing to pay more in many cases (Emerton et al., 2006, p. 59). Other tourism-based charges could relate to indirect taxes on tourism (departure tax) and tourist facilities (hotels, cruise ships), a portion of which could be applied to protected areas. 401

Extraction fees could be explored for the harvesting, processing and sale of products from protected areas, as long as such extraction is consistent with conservation objectives. Charges for bioprospecting for commercial use is a new area with potential, as long as it is backed by a legal agreement with clear provisions that some of the funds will go towards conservation. 402

Payment for ecosystem services and biodiversity protection. Payment for ecosystem services using market forces is a new and emerging area for generating protected area financing. Examples of payment mechanisms being piloted at the ecosystem level include receiving payments for protecting watersheds (from public hydropower and water supply utilities), carbon sequestration (related to carbon trading markets), and wetlands and related biodiversity conservation (where land developers fund substitute areas for areas they develop, using the no-net-loss principle). 403

- 404 This area of activity, known as ‘conservation banking’, ‘biodiversity banking’ or ‘biobanking’, is being increasingly recognized by the business community. As a new, emerging programme, such schemes are viewed by many conservationists as having considerable potential to strengthen efforts to conserve biodiversity and ecosystems. Schemes are being developed in several countries, including Australia and the US.
- 405 The idea of conservation banking is for the landowner or rightsholder to earn biodiversity ‘credits’ for their commitment to enhance and protect biodiversity values on their lands. For example, credits are obtained for protecting the habitat of specific threatened or endangered species that occur on the site. The arrangement is formalized through a legal agreement. These credits can then be sold to generate funds for the management of the site, or to offset development elsewhere. They may also be sold to conservation organizations or to governments interested in investing in conservation over the long term. Banks set up to trade credits must be approved by the government. Guidelines are beginning to emerge on how to set up such biodiversity banking schemes as credit trading systems (Carroll et al., 2007).

13 Miscellaneous

13.1 Enabling provisions

- 406 Not all matters can or should be settled in principal legislation. Many details should be left to subsidiary legislation or other administrative instruments. This provides flexibility to adapt to changing conditions and respond to improved scientific understanding. It is important for protected areas legislation to include a separate enabling provision, empowering the minister in charge or equivalent executive power to issue and revise, as necessary, regulations to give further effect to the legislation.
- 407 Subject to the national legal system, the enabling provision may cover any matters required or permitted under the law. In addition, the provision may enumerate specific regulatory areas. An enumeration is particularly useful to list in one section the major matters proposed for further regulation. All areas listed may not require immediate enactment of regulations. However, it is important to delegate the power to make regulations, to accommodate future needs as they arise.
- 408 Further regulation will frequently be necessary for several matters. These include entry and use conditions for various recreational and other purposes, procedures for granting permits, licences, leases or concessions for scientific research, resource manipulation or other uses otherwise prohibited, bioprospecting, specific protection for certain species, and advisory committee mandates and procedures.
- 409 It may be necessary and appropriate to develop regulations for individual protected areas, to cover specific purposes, objectives, management needs and uses. This should be expressly authorized in the legislation.
- 410 In order to maintain adequate protection, some protected areas may require regulation as soon as possible after being designated or created. In such instances, the legislation may designate time limits within which specific regulations must be issued for certain matters.
- 411 Regulations may need to be periodically re-examined and updated to keep pace with scientific, technical, social, political and economic changes. The legislation should contain procedures for promulgating, reviewing and revising regulations. Some regulations regarding, for example, fees, or lists of protected, endangered and threatened species, should also be designated for review and revision as

needed, normally every five or so years. Matters requiring review and revision at set intervals should be identified in the legislation wherever possible.

13.2 Transitional provisions, repeal and revision

Subject to local legal practice, a transitional provision may need to be included to make special provisions for the application of legislation to circumstances which exist at the time the legislation comes into effect. This is important to provide an orderly transition, particularly where new requirements are specified in the legislation, so as to minimize burdens associated with them. 412

In addition, the legal drafter should prepare a list of legislation that will need to be repealed or amended with the enactment of the new protected areas legislation. This list may become a schedule to the new law. The list of legislation to be repealed or amended may be drawn from the inventory, review and analysis of existing laws undertaken as part of the preparations for drafting (see section 1, above). That review and analysis will have identified inconsistencies and areas of overlap. The resulting list should be supplemented by items that come to the drafter's attention during the drafting process. The process may also identify areas where piecemeal regulations should be consolidated. It is highly likely that some revision or repeal of other laws or regulations will be required, following the enactment of new protected areas legislation. This is an important part of the legislative process and provides certainty about the effect of new protected areas legislation on existing laws. 413

As a general rule, repeals should be express and also specific. Information should include a reference to the statute and the section, as relevant, and should either repeal the statute or section entirely, or contain the exact wording to amend the section so that it is clear that a particular aspect no longer applies or applies in a new way. This will provide certainty and reduce potential challenges and conflicting applications in the future. This principle is stressed here because of the many changes that new or strengthened protected areas legislation may require in other existing conservation and related laws. 414

As noted in section 2, above, some jurisdictions especially in common law countries apply the doctrine of implied repeal. This provides that if the provisions of a later statute are contrary to the provisions of an earlier statute, the later statute by implication repeals the earlier statute. In such cases, the latter would be treated as repealed. Subject to local legal practice, a general clause could also be added to the effect that the protected areas law has overriding effect. For the purpose of legal certainty in implementation and judicial review, however, it is always desirable to identify wherever possible the specific laws or provisions that will be repealed by the new legislation. 415

14 Schedules

Subject to legal practice, schedules may be attached to the protected areas legislation. Schedules may include various matters called for in the legislation, including: 416

- (a) declared or established protected areas under the legislation, along with their legal description, protected area management category and governance approach;
- (b) membership and procedures for boards of statutory corporations;
- (c) information on specific advisory committees;
- (d) lists of IAS that pose potential or existing threats to the protected areas system or to specific sites;
- (e) penalties for various offences;
- (f) legislation repealed or amended.

Part III, Chapter 2: Special issues for marine protected areas

This chapter provides guidance on key elements in protected areas legislation important to support the special features and needs of marine protected areas (MPAs). It builds on Chapter 1 of this Part and should be read together with those sections. This chapter should also be read with Part I on international best management practice and legal principles, and Part II on governance.

Introduction

This chapter is divided into four sections. Section 1 provides a brief historical perspective on how legislative approaches to MPAs have evolved, while section 2 highlights special features of marine environments that are important to take into account in the MPA provisions of a protected areas legal framework. Section 3 covers elements of international conventions and programmes specifically concerning MPAs, and section 4 lays out special elements and related issues for MPA legal provisions that flow from those considerations. Section 4 generally follows the order of Chapter 1 to help with cross-referencing and integration, as relevant. 1

It was considered essential for these *Guidelines for Protected Areas Legislation* to include a separate chapter on special legal issues for MPAs. Today almost every coastal country has at least one marine and coastal protected area. However, legal tools and techniques for marine biodiversity conservation are much less advanced than for terrestrial environments. In part this is because scientific understanding about the operation of marine ecosystems is in its infancy and the history of experience with MPA law and policy is relatively short. The legal framework for MPAs in many countries continues to be dispersed and fragmented, and is not well tuned to the special threats, scientific knowledge and management challenges involved. Only a few countries have protected areas legislation that is fully responsive to modern MPA needs. 2

Globally, the oceans make up about 70 per cent of our world in terms of surface area and contain 97 per cent of the earth's water. They comprise more than 90 per cent of the planet's biologically useful habitat, containing most of the life on Earth including nearly all of the major groups of animals, plants and microbes (Day, 2006). The oceans drive the planet's climate and weather, and regulate temperature. They generate much of the oxygen in the atmosphere, absorb much of the carbon dioxide, and replenish fresh water for both land and sea through the formation of clouds. They supply food and generate billions of dollars for national economies. Their ecosystem functions and services are critical for human life. Today there is growing recognition that these systems are under ever-increasing threat from activities within and outside these ecosystems. The Millennium Ecosystem Assessment, the first global assessment of the health of the planet's ecosystems, found that marine and coastal systems are among the most threatened on the planet (WRI, 2005, ch. 18, 19). 3

It is now recognized worldwide that MPAs (under a variety of names which may include marine parks, marine reserves, marine sanctuaries) are an essential tool for the conservation of marine and coastal biodiversity, sustaining the productivity of marine ecosystems and restoring economically important living marine resources, including fisheries, through protection in no-take zones. In addition, the latest scientific evidence indicates that several marine and coastal ecosystems play a significant 4

role in carbon management and carbon sequestration, helping mitigate climate change (Laffoley and Grimsditch, 2009). These ecosystems include tidal salt marshes, mangroves, seagrass meadows and kelp forests. Initial studies suggest that the carbon management potential of these key ecosystems compares favourably with and, in some respects, may exceed the potential of carbon sinks on land.

- 5 However, marine and coastal protected areas cover only about 1 per cent of the surface area of the earth's oceans, as opposed to the 12 per cent of the earth's land area that is under protection. Experts agree that an immediate global need is to rapidly increase effective MPA coverage and scale up ocean management (Laffoley, 2008). The Convention on Biological Diversity (CBD) Programme of Work on Protected Areas calls on Parties to:

As a matter of urgency, [...] by 2008 in the marine environment, take action to address the under-representation of marine and inland water ecosystems in existing national and regional systems of protected areas, taking into account marine ecosystems beyond areas of national jurisdiction in accordance with applicable international law, and transboundary inland water ecosystems (CBD COP 2004 VII/28, programme element 1).

- 6 In this chapter, the phrase 'marine protected areas' includes marine and coastal protected areas and, depending on the context, may relate to sites that are completely offshore, entirely coastal or a combination of the two. The chapter focuses on MPAs under national jurisdiction. Marine areas beyond national jurisdiction have different legal structures and processes of development and implementation, governed by international treaties and international customary law. Such areas are commonly known as the high seas, one of the ocean zones under the United Nations Convention on the Law of the Sea (UNCLOS) (1982) (see section 3.1.1, below).

1 Historical perspective

- 7 The use of MPAs as a management tool for fisheries resources and to protect cultural and sacred sites has existed for hundreds of years in the form of traditional and community-driven controls and practices. Gradually, legislation was developed to set up marine reserves and other designated coastal and marine protected areas for fisheries management, and in many countries this continues to be their main purpose. MPAs were established under fisheries legislation to protect fish breeding areas and other areas critical for the life cycle of commercial fisheries. Land use planning laws protected designated coastal areas for fisheries management and as buffers against natural disasters (for example, protecting environmentally sensitive coastal features such as sand dunes, mangroves, near-shore seagrass beds, estuaries and tidal inlets). Early laws were also enacted to protect cultural or historic marine sites (for example, sunken ships and archaeological ruins).
- 8 With the development of protected areas legislation as a distinct field of environmental law, it was assumed that all ecosystems from land to sea could be accommodated. In practice, protected areas were established mostly on land and management principles were oriented toward terrestrial sites. Formal MPAs were in most cases limited to coastal or near-shore areas and, in many jurisdictions, continued to be delegated or assigned to fisheries agencies because of their expertise in management or co-management.
- 9 The role of MPAs was gradually expanded to biodiversity conservation, as scientific understanding grew about the important biodiversity and ecosystem values of the oceans. Fisheries management then became an associated objective rather than the primary objective. Interest grew in establishing MPAs further seaward, including in deep waters, and on a larger scale to better reflect the ecosystem approach.

Since the mid-1980s, information in the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC) database indicates that the spatial extent of marine areas being protected globally has grown at an annual rate of 4.5 per cent (Laffoley, 2008). As of the beginning of 2009, there were close to 5,700 national MPAs in the World Database on Protected Areas (WDPA). These sites equate to an area of approximately 3 million sq km of ocean currently under some form of protection, or less than 1 per cent of the ocean surface—barely a pinpoint when compared to the scale of global oceans. These figures do not include sites designated under the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972), or national sites that are proposed but not yet officially declared (UNEP-WCMC, 2009). 10

2 Marine features requiring special attention

Today, scientists and policy experts alike recognize that MPAs require special legal consideration to address their distinct features. In response, states are increasingly enacting legislation to take into account the unique challenges of marine ecosystem management and conservation. 11

Legislative approaches to MPAs vary. In many countries, it is most effective to include MPAs within the principal protected areas legislation, giving the subject a separate chapter or part. This facilitates treatment of the marine component as an integral part of the protected areas system, allowing the integration of land, coastal and marine provisions through cross references to the relevant sections of the principal legislation. In small island states, the protected areas system is essentially marine since even terrestrial sites have evolved and adapted in the context of pervasive marine weather, climate and ecosystem influences. 12

In countries with large expanses of marine areas needing protection, and involving complex jurisdictional issues and extensive regulatory activity, MPAs may require separate legislation (see, for example, the Australia case study accompanying these guidelines: Boer and Gruber, 2010a). Another possibility is for a country to use a mixed approach, where MPAs are authorized under the protected areas legislation but separate marine living resource legislation is used to regulate such areas (see, for example, the South Africa case study: Paterson, 2010). Some countries separate legislative coverage if the site is offshore and not attached to the tidal zone, with distinct legislation for offshore and coastal areas (see France case study: Guignier and Prieur, 2010). Countries may also enact umbrella marine legislation, under which specific MPAs are protected and governed by separate regulations (see the Gully case study: VanderZwaag and Macnab, 2010). In other countries, MPAs are authorized under a number of laws (for example, the Philippines, where the protected areas legislation, fisheries law and the local government code authorize marine protection with respect to matters under those jurisdictions; see Philippines case study: La Viña et al., 2010). 13

Another possibility is where an MPA may be sufficiently large and complex to require its own site-specific law. The first marine park created by this means was the Great Barrier Reef Marine Park in Australia, established in 1975 (see Boer and Gruber, 2010a). Some countries may have coastal conservation laws addressing pollution control and coastal development, which would also play a role in supporting integrated marine and coastal management and associated marine and coastal protected areas. 14

Regardless of the approach, MPAs should be part of the formal system of protected areas. Jurisdictional responsibilities should be clear and compatible, and legislation should be harmonized and integrated into the principal protected areas legal framework, either directly or by cross reference. 15

- 16 To provide context for the legislative options most appropriate for protected area systems containing existing or potential MPAs, it is important to review aspects of the marine environment that present special challenges which need to be reflected, as appropriate, in legislation.

2.1 Special characteristics

- 17 A number of characteristics of marine ecosystems make them inherently different from terrestrial systems. These differences, it is now recognized, require special legislative treatment if the legal framework is to be effective in supporting marine and coastal protected areas. The main distinctions are summarized below (for additional information, see Belfiore et al., 2004; Day, 2006; Kelleher, 1999; Salm et al., 2000; Sobel and Dahlgren, 2004). The legal drafter should be familiar with these special features in the context of institutional, management and enforcement mechanisms.

Table III(2)-1: Some of the world's largest MPAs

MPA	Size (sq km)	How legally established
Phoenix Islands Protected Area, Kiribati (established 2006/2008)	410,500 covers most of the EEZ	Regulation of 2008 under the Kiribati Environment Act 1999
Papahānaumokuākea Marine National Monument, Hawaii, US (established 2006)	362,000 covers large parts of EEZ	Presidential Proclamation 8031 of 2006 under the Antiquities Act 1906
Great Barrier Reef Marine Park, Australia (established 1975)	344,400	Great Barrier Reef Marine Park Act 1975
Macquarie Island Marine Reserve, Australia (established 1999)	162,000 covers large parts of EEZ	Declared by Governor General under the National Parks and Wildlife Conservation Act 1975
Marianas Trench Marine National Monument, US (established 2009)	153,620 covers large parts of EEZ	Presidential Proclamation 8335 of 2009 under the Antiquities Act 1906
Pacific Remote Islands Marine National Monument, US (established 2009)	139,889 covers large parts of EEZ	Presidential Proclamation 8336 of 2009 under the Antiquities Act 1906
Galapagos Marine Reserve, Ecuador (established 1998)	133,000 extends 40 nm	Regulation pursuant to the special law for the province of Galapagos (Reglamento a la ley especial para la provincia de Galápagos)
Greenland National Park, Denmark (established 1974)	110,000 extends 3 nm from baseline	In 1974, the Park was declared by the Greenland National Council and in 1980 confirmed as a national park under Greenlandic law through 'Executive Order no. 7 of 17 June 1992 from the Greenland Home Rule Authority concerning the National Park in North and East Greenland, as amended by Executive Order no. 16 of 5 October 1999'.
Seaflower Marine Protected Area, Colombia (established 2005)	65,000	Declared by the Minister of Environment, Housing and Territorial Development
Heard Island and McDonald Islands Marine Reserve, Australia (established 2002)	64,600 extends to 200 nm in places	Declared by Governor General under the Environment Protection and Biodiversity Conservation Act 1999
<i>Contributed by Gordon McGuire.</i>		

Exceptionally large areas. There has been progress in recent years with the establishment of new marine sites for biodiversity conservation covering larger expanses of ocean surface than ever before. Most notably, some of the newest MPAs are more than 100,000 sq km in size (see Table III(2)-1 for some of the world's largest MPAs and their legislative basis). Such areas present new management challenges as well as scientific opportunities never before available. 18

Areas beyond national jurisdiction. The unique feature of marine ecosystems is the vast area of the earth's ocean surface that exists beyond national jurisdiction. In terrestrial environments, almost all areas fall within some national regime. In the marine environment, areas beyond national jurisdiction and areas within national jurisdiction share biophysical processes and living resources, and can influence each other. As such, they cannot be treated as separate and isolated zones for management purposes. 19

There is growing recognition that tools applied to areas within the limits of national jurisdiction need to be coherent, compatible and complementary to those applied to MPAs beyond the limits of national jurisdiction, and vice versa (CBD COP 2006 VIII/24, reaffirmed by CBD COP 2008 IX/20). The United Nations (UN) and the CBD Secretariat increasingly work together within that frame of reference (see Box III(2)-1). IUCN and other international organizations and bodies involved in national marine areas have contributed extensive legal analysis on these subjects for international deliberations (see Gjerde et al., 2008a; Gjerde et al., 2008b; Kimball, 2005). 20

Box III(2)-1: Recognizing ecosystem linkages between marine areas within national jurisdiction and the high seas

The UN in 2006 set up the Ad Hoc Open-ended Informal Working Group to study issues of marine biodiversity conservation beyond national jurisdiction. In 2007, the UN Ad Hoc Working Group generated the Global Open Oceans and Deep Seabed (GOODS) Biogeographic Classification (UNESCO, 2009), which was used by the CBD Ad Hoc Working Group on Protected Areas in its deliberations and was subsequently incorporated in decisions of the Ninth Meeting of the Conference of the Parties to the CBD (COP 9) in Bonn, Germany, in 2008.

Specifically, COP 9 adopted scientific criteria and guidance from the GOODS report as important for identifying MPA sites and networks generally (CBD COP 2008 IX/20, para. 14, and Annex I and II). It also invited the UN Ad Hoc Working Group to continue studying these issues, and to cooperate in further developing scientific and technical guidance in such subjects as environmental impact assessment and strategic environmental assessment in order to ensure that activities in areas beyond national jurisdiction do not compromise marine ecosystem integrity (para. 8).

COP 9 recognized the importance of a common set of scientific guidelines and criteria for MPAs, whether within or outside national jurisdiction, and adopted guidelines for identifying and selecting MPAs within national jurisdiction as well as in the open ocean. It also expressed serious concerns about potential threats from activities within national jurisdiction (CBD COP 2008 IX/20). The Eighth Meeting of the Conference of the Parties to the CBD in Curitiba, Brazil, in 2006, directed special attention to deep seabed ecosystems beyond the limits of national jurisdiction, including hydrothermal vents, cold seeps, seamounts, coldwater coral and sponge reef ecosystems. It requested Parties and urged other states to take measures to urgently manage activities and processes under their jurisdiction and control which may have significant adverse impacts on deep seabed ecosystems and species (CBD COP 2006 VIII/21, para. 3).

Contributed by Gordon McGuire.

In the coming years, international deliberations and technical input on high seas issues will have increasing relevance for the management of ocean areas under national jurisdiction as well as for national legislation. The CBD Conference of the Parties recognized this in 2006 in the context of efforts to develop scientific criteria and guidance for MPAs beyond national jurisdiction, noting that the "application of tools beyond and within national jurisdiction need to be coherent, compatible and complementary and without prejudice to the rights and obligations of coastal States under international law" (CBD COP 2006 VIII/24, para. 38). Recognizing this connection, the CBD Conference of the 21

Parties in 2008 adopted scientific guidance for identifying and designing representative networks of MPAs, including in open ocean waters and deep-sea habitats (CBD COP 2008 IX/20; see section 3.2.1, below).

- 22 **Vastly extended areas within national jurisdiction.** Historically, MPAs have largely been established near the shore, most commonly to include coastal and near-shore marine waters. Under UNCLOS (discussed further section 3.1.1, below), coastal states may declare a 200 nm exclusive economic zone (EEZ). In many coastal states, EEZs extend the marine area under national jurisdiction to cover an area that is larger than the entire land area and, in small coastal or island states, many times larger. The new challenges presented by this oceans regime entail costs and capacity requirements never before faced by most countries for management, monitoring and enforcement over large and remote areas (see Box III(2)-2).

Box III(2)-2: South Africa's first offshore MPA

In May 2009, South Africa's Minister of Environmental Affairs and Tourism gazetted a proposal to create one of the largest MPAs in the world, the Prince Edward Islands Marine Protected Area. This proposed MPA is located in the Southern Ocean and will be South Africa's first offshore MPA, totalling some 180,633 sq km and covering one third of South Africa's EEZ around the islands.

Once declared, this MPA will increase protection of South Africa's waters (either fully or partially) from less than 1 per cent to over 10 per cent. The proposal creates a no-take sanctuary zone of 12 nm around the islands (4,400 sq km) and defines other restricted use zones. The design is based on a detailed scientific plan, and supported by a draft management and compliance plan.

With limited additional funding for this new initiative, the Minister emphasized the need for increased reliance on support from stakeholders as well as other countries through international agreements to maintain the no-take zone. The Minister also called for implementing a proposed ban on all bottom-trawling and gillnetting throughout the site. The site has been given interim protection status until its final declaration.

Source: DEAT, 2009c; MPA News, 2009. See also DEAT, 2009a; DEAT, 2009b.

- 23 **Marine ecosystems less well understood.** Marine systems have not been as thoroughly studied as terrestrial systems. While both have complex mixes of different environments and species diversity, detailed knowledge of the distribution and relative importance of marine biota is missing or incomplete for much of the sea under national jurisdiction. Estimates are that oceans provide more than 90 per cent of the biologically useful habitat for life on Earth, including nearly all the major groups of animals, plants and microbes (Day, 2006; UNEP, 2006). However, much of the marine life and biodiversity of the oceans is yet to be discovered and described. New discoveries are being made in understanding deep ocean processes, sea mounts, hydrothermal vents and cold water corals which support ecosystems and a diversity of life never before known. These systems may be particularly vulnerable to bioprospecting, mineral exploration, bottom trawling and other human activities, and need special protection. In contrast to coastal MPAs, which are focused on relatively fixed ecosystems such as marshes, mangroves and seagrasses, planning processes for offshore MPAs may need to proceed with less scientific data or traditional knowledge to inform decisions.
- 24 International marine experts urge, however, that uncertainty should not stop action to declare MPAs, especially in the deep ocean. The IUCN Guidelines for Marine Protected Areas identify this point as a key lesson for MPA development:

It is better to have an MPA which is not ideal in the ecological sense but which meets the primary objective than to strive vainly to create the 'perfect MPA'. It is usually a mistake to postpone action on the establishment of an MPA because biophysical information is incomplete. There will usually be sufficient information to indicate whether the MPA is justified ecologically and to set reasonable boundaries (Kelleher, 1999, p. xiii).

This underscores the need for MPA legislation to provide for incremental implementation, especially with large-scale multiple-use sites, starting with planning and management of those parts of a site that are well understood and allowing time for more data collection on other parts to better understand the biological resources, stakeholder interests and best regulatory tools for the identified area (see Box III(2)-3).

Box III(2)-3: New Zealand's MPAs—coastal versus deepwater zones

New Zealand's MPA Policy was updated in 2005 to emphasize the creation of a network of MPAs that is comprehensive and representative of New Zealand's marine habitats and ecosystems. Under this policy, a distinction is drawn between near-shore and offshore areas, which in implementation has been taken to mean 'coastal zone' and 'deepwater zone'. Guidelines for implementing the policy set the boundary between the two zones as the limit of the territorial sea, or 12 nm from the baseline, and for biogeographical classification, the 200 m depth contour, roughly the continental shelf break.

Implementation is flexibly tailored to the features of the two zones. Most notably, an incremental approach is used. While MPA planning for the coastal waters has already commenced, site-specific planning for the deepwater zone will not begin until 2013 because there is currently insufficient data about the deepwater environment to understand the most high-value sites and the best regulatory approach for their protection, while taking into account stakeholder interests. The government will use this time period to narrow the information gap. Before 2013, the government plans to revisit both the classification system and the protection standard in deepwater areas to make sure they reflect improved knowledge and research conducted between now and 2013.

The two zones are also being treated differently in other respects. Activities in the deepwater region will be implemented at the national level, while in the coastal zone they will be implemented regionally. Coastal implementation will involve the development of an integrated regional approach for each sub-region by community-based Marine Protection Planning Forums. Deepwater implementation will be more centralized, guided through a special panel with specific offshore expertise and representing offshore interests. Different classification systems will also be used: for the coastal zone, biogeographic characteristics (ecological and physical), and for the deepwater zone, a more basic tool using environmental classes drawn from a 2005 Marine Environmental Classification system which identifies general areas for further investigation. This approach is, again, incremental because of the larger scale and the lack of reliable scientific information to conduct biogeographic analysis.

For further information see the MPA Policy (New Zealand Department of Conservation and Ministry of Fisheries, 2005).

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Large-scale connectivity of natural processes. There is high natural connectivity between marine, coastal and inland systems. This precludes the effective management of a marine area independent of its adjoining coastal and inland areas, including coastal estuaries, wetlands and rivers. MPAs may be positively or negatively affected by activities on land, particularly in the case of coastal or near-shore protected areas. Land-based sources of marine pollution represent a broadly shared threat to MPAs worldwide. As climate change impacts increase, issues of sea level rise, advancing salinity, contamination of groundwater, extreme weather events and other coastal changes will pose special challenges for human systems as well as natural ones, and MPAs will be important for adaptation and protection. 25

This strong terrestrial-marine connectivity has implications for the design and management of MPAs because coastal and near-shore areas, and sometimes even inland areas (for example, associated watersheds), may need to be included in the broader management plan. Recognizing this linkage, guidelines and principles under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971) and under the CBD for marine and coastal protected areas call for such areas to be incorporated into integrated coastal and ocean management regimes (see sections 3.2.1 and 3.2.2, below). 26

Box III(2)-4: Great Australian Bight Marine Park: federal–state cooperation

As a result of legal challenges from Australian states in the 1970s against the Commonwealth government's claim of exclusive sovereignty over all coastal waters, a political agreement was reached in 1979, known as the Offshore Constitutional Settlement, which gave the states a legal and administrative role in offshore areas. The arrangement was implemented principally through the Coastal Waters (State Title) Act 1980 and the Coastal Waters (Northern Territory Title) Act 1980, both of which entered into force in February 1983 and gave the states and the Northern Territory title to the coastal waters out to 3 nm.

This legal arrangement opened the door in the late 1990s for collaborative establishment by the Commonwealth and South Australia governments of the Great Australian Bight Marine Park (GABMP). Covering a marine area of more than 20,000 sq km, the park is one of Australia's largest, though strictly speaking it is comprised of two separate parks. The GABMP is an example of inter-jurisdictional cooperation within a federation and the use of a mixed-zone MPA to achieve multiple conservation objectives over an area covering discrete marine systems.

The **state component**, declared in 1996 under South Australia's National Parks and Wildlife Act 1972 primarily for the protection of the Southern right whale and the Australian sea lion, included a pre-existing whale sanctuary established in 1995 under the state's Fisheries Act 1982 (now replaced by the Fisheries Management Act 2007). This component covers 1,683 sq km of marine area extending 3 nm from the shore along roughly 160 nm of coast. It is divided into two adjoining protection zones: a sanctuary zone (a strict nature reserve) and a conservation zone (a managed-resource protected area).

The **Commonwealth component**, declared in 1998 under the National Parks and Wildlife Conservation Act 1975 (now replaced by the Environment Protection and Biodiversity Conservation Act 1999), adjoins the state park in the shape of a giant 'T', the top of which is adjacent to the state park, beginning 3 nm from the shore. The Commonwealth waters are divided into two overlapping zones: a marine mammal protection zone and a benthic protection zone (both classified as managed-resource protected areas). The Commonwealth portion of the park has two main objectives: to complement the purposes of the adjacent state park, and to protect a representative strip of the unique seafloor (benthic) environment in line with the development of a National Representative System of Marine Protected Areas under Australia's Oceans Policy and international agreements. Together, the two zones cover an area of 19,395 sq km and include the waters, seabed and subsoil to a depth of 1,000 m below the seabed. The benthic zone protects marine life associated with the continental shelf and slope of the bight, and the marine mammal zone is managed especially to provide undisturbed calving for the Southern right whale and protection for the Australian sea lion. Owing to the unique design of the benthic zone, the park is the first in Australia to include an area specially designed to be representative of the region.

Cooperation between state and Commonwealth governments

Although the two adjoining parks have their own management plans, each is managed in a cooperative manner. The appointed park manager is stationed in South Australia, and a cross-jurisdictional steering committee guides day-to-day management of the combined park, consisting of representatives from the Australian government's Department of the Environment, Water, Heritage and the Arts, the South Australian Department for Environment and Heritage, Department of Primary Industries and Resources South Australia, District Council of Ceduna, South Australian Tourism Commission, and Australian Fisheries Management Authority. A service agreement exists between the two levels of government through which the Commonwealth government provides funding each year to the South Australian government in return for management services.

(For further information, see Commonwealth of Australia, 2009; Government of South Australia, 2010.)

Contributed by Gordon McGuire.

- 27 Natural systems connectivity is even more complex in large-scale offshore deepwater marine environments. In such areas, ocean currents, wind drifts and species migrations create natural linkages between distant regions of the ocean. Ocean processes transport nutrients, food, seeds, larvae and organisms, as well as pollutants, across vast ocean and land-ocean areas. These processes are highly dynamic and subject to natural changes, sometimes rapid, without regard to political boundaries, including national jurisdictions or the boundaries of MPAs. To begin to address these special properties of the marine environment, the large marine ecosystem (LME) approach has gained attention in recent years as a means to aid marine ecosystem-based management and conservation. LMEs are areas of the ocean characterized by distinct depths, hydrology, productivity and food-web interactions. Scientists have identified 64 LMEs across the world (see UNEP, 2008; see also Large Marine Ecosystems of the World website). These have become the focal point of global efforts to reduce the degradation of

linked watersheds, marine resources and coastal environments caused by pollution, habitat loss and overfishing.

Three-dimensional space. In the ocean environment, organisms are less dependent on the ocean floor than terrestrial organisms are on the land. Because of the fluid nature of the sea, the movement of marine organisms may be horizontal and vertical, as well as migratory over large distances. There is limited species endemism because of fewer limitations on species movement and greater species mixing. There are also few sharply defined biogeographic provinces with unique species composition. Many marine ecological systems can be highly complex, as with coral reefs where living organisms and their associated non-living physical environment interact and influence the properties of each other. They can also be highly productive, as with upwelling areas where deep ocean waters rise to the surface. In these dynamic systems, the movement of chemical and other pollutants can be immediately harmful to living marine resources which are always in contact with their surrounding water.

28

Box III(2)-5: Locally managed marine areas in the South Pacific

The South Pacific region has experienced significant growth in community conservation areas in the last decade. More than 500 communities spanning 15 independent countries and territories have participated. In 2000, Pacific island community members and practitioners began to characterize these community conserved areas as locally managed marine areas (LMMAs), to better reflect the type of marine resource management being undertaken or envisaged in the region (Govan et al., 2009b).

LMMAs are managed under community-based marine tenure systems that are either legally or informally recognized. The approach joins together contemporary marine protection efforts with traditional conservation practices through community-based adaptive management and local ownership and control. Guidelines developed for LMMAs by the South Pacific Locally Managed Marine Area Network define an LMMA as an area of near-shore waters and coastal resources that is largely or wholly managed at the local level by a coastal community, landowning groups, partner organizations, or collaborative government representatives who reside or are based in the immediate area (Govan et al., 2008, p. 2).

An analysis of the status and potential of this approach was undertaken during 2008–09 under the Coral Reef InitiativeS for the Pacific (CRISP). The assessment found considerable success, with many communities anecdotally reporting rapid and appreciable increases of marine resources within closed areas and an increasing body of technical literature which seemed to confirm this. The assessment also found that the locally managed approach to protected areas was the only approach to marine managed areas being actively pursued in the region, with LMMAs covering some 30,000 sq km, with over 12,000 sq km under active management of which more than 1,000 sq km were no-take zones (Govan et al., 2009b, p. 4).

With respect to legal frameworks, the study found that community-based resource management was not fully supported in the legislation of many participating countries and recommended several measures, including:

- (a) Consolidate and integrate the long-term role of various levels of government and sectors, ideally in a decentralized fashion, to support communities with on-the-ground collaboration, and, as part of this effort, strengthen legislation for inshore fisheries, protected areas and wider environmental management.
- (b) Broaden the adaptive management processes central to LMMAs to overall island management including ecosystem-wide (including terrestrial) and sustainable development issues, climate change adaptation, and community resilience.
- (c) Create an enabling environment by building institutions and legislation more supportive for community initiatives incorporating sustainable management of resources, and remove bureaucratic bottlenecks currently insurmountable by communities.
- (d) Preserve traditional tenure and governance systems on which the success of local management depends, taking great care not to undermine or reform these systems, but instead to develop guidance for practitioners to be sensitized around the issues of tenure and for improving the use of traditional ecological knowledge and other related social factors in each country.
- (e) Defend local and cultural approaches and the protected area characteristics that have developed for LMMAs in response to local needs, some of which may be determined by social rather than biological factors, and make international bodies aware of these characteristics before assuming that international definitions are regionally applicable.

Source: Govan et al., 2008; Govan et al., 2009a; Govan et al., 2009b.

- 29 **High environmental variability.** The complex and dynamic features of the oceans generate high environmental variability both temporally and spatially, making living marine resources and marine ecosystems particularly vulnerable to natural and human stresses. Many of these stresses may originate at great distances from the resulting impact. This suggests that the effective design and management of a particular MPA may require marine spatial planning and management on a much larger, multiple-use and multi-sectoral scale, than for the designated MPA alone (Ehler and Douvère, 2009). It also suggests the importance of establishing large MPAs as compared to small isolated sites, particularly in deepwater areas, and the critical need for buffer zones around strictly protected areas. The creation of MPAs comprising mixed zones with coastal waters and deep waters, and involving collaborative mechanisms with other sectors and stakeholders, will be increasingly important to protect the dynamic, interconnected nature of marine systems (see Box III(2)-4).
- 30 **Long-standing traditional tenure and resource rights regimes.** Most marine areas except for the high seas have traditionally been used by fishing and coastal communities. These communities may also have traditional tenure systems related to marine waters and the resources in them. Communities have usually treated marine areas as commons, or common property, and developed customs, rules and regulations regarding their use. These characteristics of marine areas need to be carefully reflected in the formulation of MPA legislation. The South Pacific is one such region where traditional tenure and governance mechanisms are being used with significant success to establish MPAs as community conserved areas (see Box III(2)-5).

2.2 Special threats

- 31 In recent decades, scientific understanding has improved significantly about the deteriorating state of the world's oceans, and the major threats to marine ecosystems and MPAs. The most significant direct threats come from habitat destruction, overfishing and land-based sources of pollution as well as climate change, which is likely to present one of the most severe threats to MPAs worldwide in the coming decades. Depending on the area and its uses, other threats may come from unsustainable tourism, dredging, mineral and sand extraction, shipping, invasive or introduced species, oil exploitation, bioprospecting, aquaculture and mariculture. Some of these threats may arise outside the MPA and others may originate inside it. There is extensive literature documenting and summarizing these threats (see, for example, Day, 2006; Salm et al., 2000; Sobel and Dahlgren, 2004).
- 32 It is important for the legal drafter working with protected area authorities to understand existing or potential threats sufficiently well to draft MPA legislative provisions that provide adequate support for MPA authorities to effectively address these threats. Such provisions should include the necessary authority to undertake protective measures for designated marine areas, and to consult and negotiate marine conservation arrangements with other government sectors and stakeholders. In many instances, such consultations will need to include new kinds of stakeholders with multiple and sometimes competing marine interests, such as domestic and international shipping, local and foreign fishing operations, and ocean mining and energy production. MPA legislation also needs to give special attention to the new challenges faced by protected area authorities with respect to compliance and enforcement in large and sometimes distant marine areas in order to best address these threats and the needs of stakeholders.
- 33 **Unsustainable fishing.** As technology has advanced and the scope of industrial fishing and related extractive industries has become global, one of the most immediate and growing threats to MPAs worldwide is unsustainable commercial fishing (Sobel and Dahlgren, 2004, p. 34). Not only does this threat directly deplete target species that are overfished, but non-target species and endangered species

are also increasingly affected worldwide as by-catch. A related impact is the habitat destruction caused by bottom trawling and other similar fishing methods, and through lost fishing gear in which threatened species become entangled. In popular coral reef areas and other recreational sites, uncontrolled sports fishing is also causing increased concern.

Development pressures. Today, more than 60 per cent of the human population worldwide lives in coastal zones, and coastal areas face growing development and population pressures. Coastal and near-shore marine biodiversity resources and aquatic habitats are increasingly under stress from land-based pollution, sedimentation from activities on adjacent land, infilling of estuaries, alteration of sediment and other physical changes to the near-shore environment, as well as high-density commercial and residential development, fragmentation of habitats, and offshore disposal of waste. 34

Climate change. Adding to these growing and ongoing threats is the new and expanding threat of climate change. In the decades ahead, climate change is likely to be among the most severe and challenging threats to marine and coastal protected areas worldwide, adding further stress to degrading ecosystems and resources (Day, 2006, p. 628). Marine and coastal ecosystems are already experiencing significant impacts, most of them negative. Coral reefs, for example, are showing signs of severe decline in the face of changing sea temperatures, acidity, circulation and rainfall patterns. Small island states and low-lying coastal states, in particular, are being impacted in complex, multiple ways. This growing threat underscores the urgent need for countries to protect important marine and coastal ecosystems as reference sites for understanding impacts in order to design adaptive measures to help species and ecosystems become more resilient. Projected impacts from continuing climate change also add a sense of urgency to the need to expand protected area coverage with areas that store carbon and capture additional carbon dioxide to mitigate future climate change. 35

2.3 Special management challenges

Protected area authorities and MPA managers face special management challenges posed by the distinct features of marine ecosystems. Legislation needs to be supportive of and responsive to these challenges. 36

User rights and protection status of MPAs. Marine systems have often been described as ‘open access’ resources (for everyone’s use) and their overexploitation is attributed to this feature. While this may hold true for the open ocean, complex property rights exist in many coastal areas and with respect to many marine resources. Property rights may be indigenous (or traditional), historic (passed down by generations) or commercial (where the government sells the rights by licence, lease or outright sale, giving access to the resources). Rights may be held by communities collectively, by a combination of collective and individual entitlements, by corporations, or by individuals. 37

Open access remains a major issue contributing to marine species loss and ecosystem degradation worldwide, especially in deep waters (World Bank, 2006). But even in coastal waters where community traditions may have regulated the use of marine resources as part of common or collective property or heritage, regulations inherent in such use may break down under the influence of national policies, commercialization or other forces. This results in some common property regimes being converted to open-access use. This has been an issue for marine environments more than for terrestrial environments where private ownership is prevalent. In many other coastal areas, unmanaged or poorly regulated development by the government has led to an array of competing or conflicting economic uses, from industrial and artisanal fishers, to oil exploration, ports, tourism and heavy industry juxtaposed 38

at random. The boundaries between these rights may be unclear and may sometimes generate conflict.

39 In some cases, legislation or community action has worked to control access. This occurs, for example, where a formally designated MPA is effectively managed to prohibit exploitation and only compatible uses are allowed, such as low-impact tourism. Controls may also work in collective or common property regimes in many traditional societies where effective rules on access to and use of marine resources are part of sustainable practices. For an example from the South Pacific that illustrates this success, see Box III(2)5. Fiji provides another example. In that South Pacific nation, the traditional leadership of the Ucunivanua village declared a no-fishing zone for two years to allow mud clams to recover from over-harvesting. Since this declaration, regular monitoring has revealed the existence of larger and more clams as well as sightings of species not seen for years. This success has led to the decision to develop a village locally managed marine area (LMMA) (see LMMA Network website).

40 It is important to note that successfully managed access may still put protected sites under severe stress when surrounded by open access. As concluded by the World Bank study:

The problem is that no single government or governance authority has yet been able to effectively manage or harmonize competing uses and claims. [...] All but the areas set aside for nonuse pose some threat to coastal and marine biodiversity. Those with chaotic or unregulated development activities pose the greatest threat (World Bank, 2006, p. 16).

This conclusion presses the point that all protected areas legislation should emphasize the importance of compatible landscape, seascape and resource uses in areas that are adjacent to an MPA or are important for connectivity conservation.

41 **Multiple levels and diverse institutions and interests.** In most coastal countries, a wide variety of government agencies exist with a vast range of marine-related responsibilities and piecemeal interests. Almost every government entity in a coastal country, especially at the national level, is likely in some manner to have a legislatively based interest, mandate or concern over some element of coastal or marine affairs. In decentralized systems, this situation may to some degree be repeated at those levels as well. These entities may range from public institutions with responsibilities over living marine resources (for example, fisheries, wildlife) or recreation (tourism, sports), to others with mining or energy mandates, or responsibilities related to navigation (ports authorities, shipping), defence (coast guard, navy, customs), social affairs (education, culture, disaster preparedness, emergency management) or pollution control (public health, environment agency). Some may have responsibilities under international or regional conventions. Local governments may also have mechanisms and traditional or legal rights and responsibilities for near-shore use and management of both living and non-living marine resources.

42 These entities have their counterparts in stakeholder groups, from non-governmental organizations (NGOs) working in marine conservation to organized resource user groups. Such user groups include local fisheries cooperatives, and private sector companies and trade associations in industrial fishing, mining, oil and gas, shipping, and bioprospecting.

43 In sharp contrast to most terrestrial issues, these diverse institutions with marine interests and activities have little tradition of coordination or little perceived need to collaborate, particularly where mandates are single-purpose and have developed over time with little direct interaction. Moreover, some mandates are outdated, or overlap, compete or leave gaps and uncertainty as to which agency should take the lead. This makes the need for institutional mechanisms for coordination and collaboration on matters related to MPAs all the more critical. As described in Box III(2)-4, the Great Australian Bight National Park is a good example of mixed jurisdictions working collaboratively for a large multi-zoned MPA. Another example in Australia is the Solitary Islands, where New South Wales MPAs adjoin federal MPAs

and coordination takes place through management agreements designed to ensure complementary management of state and federal waters (see the Australia case study accompanying these guidelines: Boer and Gruber, 2010a; see also the New South Wales case study: Boer and Gruber, 2010b).

Less experience with protected area categories. Management experience with protected area categories for marine environments is much less developed than for terrestrial environments. MPA specialists consider it important to use the same internationally accepted system of management categories for both marine and terrestrial environments (Laffoley et al., 2008). The IUCN system of protected area management categories I–VI is used in the WDPA, and is recognized by international organizations and treaties, including the CBD. (The categories and their management objectives are summarized in Part III, Chapter 1, section 6; background is provided in Part I, section 3.2) There are several reasons for using the same system of protected area management categories for both marine and terrestrial sites. These include:

- the increasing number of large mixed sites covering marine, estuarine and adjoining coastal zones which need an integrated approach;
- the fact that in many protected area systems the same management agency has jurisdiction over all protected areas irrespective of whether they are terrestrial or marine; and
- growing recognition of the high level of connectivity between these two realms, and the need to reflect this connectivity in management (Laffoley et al., 2008).

At the same time, experts acknowledge that there is less guidance and best practice available on how to apply the IUCN protected area categories to marine systems for management and regulation. Most large marine areas consist of several individual units or management zones, reflecting the diverse interests and uses involved as well as the need to secure certain levels of biodiversity and ecosystem protection. In many cases, these zones are defined in the legislation setting up the protected area. These zones need to be clearly defined and assigned a protected area management category that is consistent with the larger primary unit.

There has been limited experience applying the IUCN protected area management categories to multiple-use marine sites (Laffoley et al., 2008). In the past, many protected area managers were of the view that all MPAs should be either category I, II or III (categories that allow only non-extractive activities, in other words, no-take zones). As countries strive to meet global and national MPA targets, the conservation community is recognizing the growing need to use the full range of protected area management categories to protect marine biodiversity. This includes sites of high biodiversity value where there is extensive interaction of people with nature through traditional resource use practices (equivalent to IUCN category V) and sites where sustainable resource use takes place (equivalent to IUCN category VI). As explained in a technical paper that discusses the use of IUCN protected area management categories in MPAs:

Provided a part of the marine, estuarine, or inshore environment fits the IUCN definition for [an] MPA (whether or not the area wants to be referred to as [an] MPA), then it is not inappropriate that it be assigned to one or more of the relevant IUCN categories. This means that any marine area, including an intertidal or sub-tidal area, “together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment” may be assigned to [an] IUCN category—even if its prime purpose is for fisheries management (Laffoley et al., 2008, p. 118).

The ‘75 per cent rule’ provided in IUCN World Commission on Protected Areas (WCPA) guidelines on protected area management categories is particularly helpful for protected area authorities when assigning an appropriate category to a large-scale, multiple-use MPA (Dudley, 2008, p. 35). Such areas may have conservation objectives as well as some zones within them where other uses are permitted

(for example, tourism lodges, villages, fishing). The rule is that the primary objective should apply to at least three quarters of the protected area. For example, an MPA that is managed mostly for multiple-use purposes as a category VI area may contain a small strictly protected core area. In such cases, where the area fits the IUCN definition of a protected area, the appropriate category formally assigned for legal purposes and international reporting would likely be category VI.

- 48 The three-dimensional nature of marine environments poses another challenge that is unique to MPAs. This relates to the vertical zoning of a marine site, as some countries are starting to do. Vertical zoning means that the management rules applied to the sea floor and the water column are different. This management technique may be important, for example, where marine life in the deepest part of the ocean (the benthic zone) needs strict protection for preservation or restoration, while surface or mid-water fishing may still be permitted. This raises legal considerations about how to describe protected area categories as applied to marine areas, whether vertical zoning creates special enforcement needs, and whether scientific monitoring may be required to ensure that water column activities do not have a negative impact on benthic communities so that the primary conservation objectives are sustained.
- 49 **Less public awareness about the sea.** In contrast to terrestrial systems, the casual admirer and average user of the oceans sees only the surface and has historically lacked awareness or understanding of the basics of ocean life and ecosystems below the surface. There has been little momentum until very recently for societies and groups to develop an ‘ocean conservation ethic’. In the case of terrestrial areas, meanwhile, it has been more than a hundred years since the emergence of a strong land conservation ethic, which began in the late 1800s in the US and quickly spread worldwide. Until science and technology made significant advances in recent decades, there had been little opportunity for scientists to conduct research and learn about the processes and life sustained by the seabed and the ocean’s underwater systems. A key part of any effective MPA network must be strong and ongoing education and awareness building of the public about the importance of coastal and marine protected areas for restoring and maintaining the ecosystem functions and productivity of marine resources.

3 MPA-specific international obligations and principles

- 50 Consideration of international obligations and principles guiding the development of MPAs starts with international oceans law. The main instruments include UNCLOS and marine environmental treaties concluded under the auspices of and managed by the International Maritime Organization (IMO), a specialized agency of the UN which facilitates implementation of rules for international shipping, including for marine environmental protection. In addition, some of the international conservation treaties reviewed in Part I have explicit provisions for marine and coastal protected areas that the legal drafter should consider when formulating MPA provisions. These considerations relate both to issues that may require implementation through national legislation as well as issues where international guidance provides principles and suggested approaches to take into account in protected areas legislation. This section also surveys some regional agreements important for MPAs and legislation, to emphasize the point that regional and bilateral agreements that countries have ratified may also contain obligations and other commitments important to take into account in MPA legal provisions.

3.1 International oceans law

3.1.1 United Nations Convention on the Law of the Sea

Basic data: Concluded in 1982, entered into force 1994, 160 States Parties

Website: <http://www.un.org/Depts/los/index.htm>

Objectives: Establishes a comprehensive legal framework for use and development of the world's oceans and their resources, addressing all matters relating to the law of the sea.

UNCLOS was designed to serve as a unifying framework for numerous, more specific ocean law agreements, and as a foundation for the progressive development of ocean law at the global and regional levels. It specifies the rights and obligations of each nation in its use of the world's oceans, as well as the general objectives and principles which must guide the protection and sustainable use of the marine and coastal environment and its resources. The IUCN publication, *International Ocean Governance* (Kimball, 2003), is a guide to UNCLOS and examines how other international conventions and institutions fit within its framework for the purposes of marine biodiversity.

51

Relevance for marine protected areas law. UNCLOS has direct relevance for national MPA legislation in two respects. First, it significantly expands the rights of coastal states to manage marine resources over vast parts of the ocean by defining five offshore zones within which coastal states exercise varying degrees of sovereignty and jurisdiction. Second, it defines internal waters as opposed to offshore waters. The rights and responsibilities of other nations within these zones are also delineated.

52

As an overarching mandate, UNCLOS places an unqualified general obligation on coastal states and other states to protect and conserve the marine environment, regardless of zone.

53

Internal waters. Under UNCLOS, "waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State" (Art. 8) The baseline is the outer boundary of internal waters and is the starting point for the delimitation of the zones beyond. Coastal states exercise full sovereignty over internal waters and may enact laws to regulate and use any resource in these waters. Coastal states also exercise maximum jurisdiction over foreign ships in this zone, as no right of passage for foreign vessels exists within internal waters, thus allowing coastal states to set conditions for entry into its ports. When a straight baseline is used, having the effect of including as internal waters extensive marine areas that had not previously been considered as such, a right of innocent passage of foreign ships may exist.

54

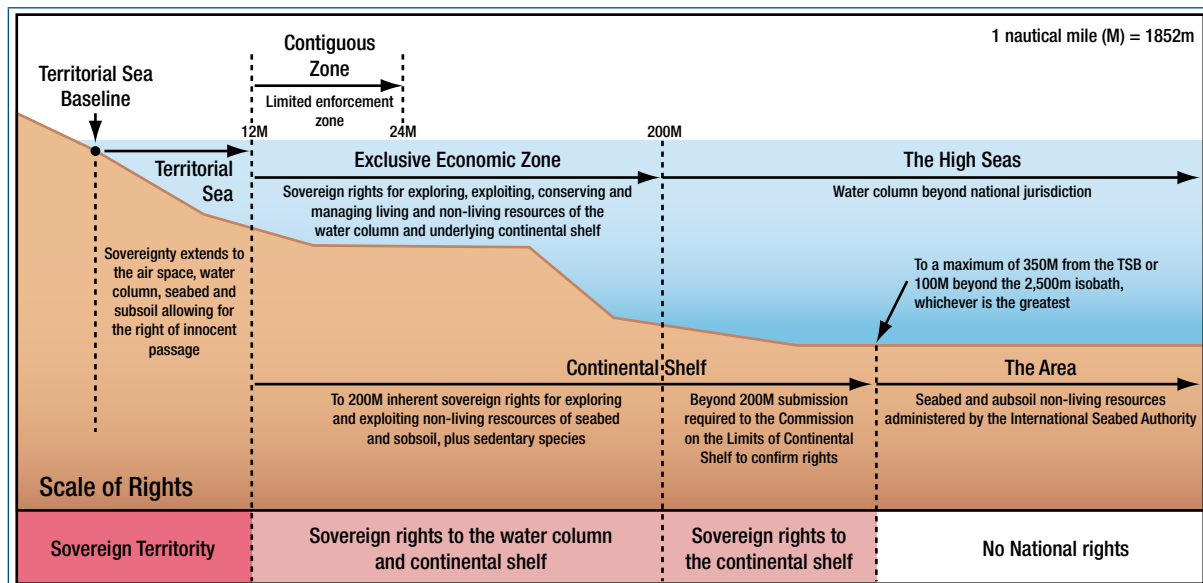
Defined ocean zones. The ocean zones defined by UNCLOS are summarized below (see Figure III(2)-1). The zones are measured from the baseline, which normally follows the low-water line along the coast, except where particular geographic configurations are present (for example, the coastline is deeply indented or cut into, or faces a fringe of islands along the coast in its immediate vicinity), in which case a method of straight baselines may be used, joining appropriate points to establish the baseline (Arts. 5, 7).

55

Territorial sea. The territorial sea, extending up to 12 nm from the baseline, is an area over which coastal states exercise full sovereignty. Sovereignty extends to the airspace, water column, seabed and subsoil, but is subject to the right of innocent passage of foreign ships. Coastal states may regulate this right by adopting laws and regulations in relation to navigation safety, marine environmental conservation and traffic schemes (for example, sea lanes) applicable to foreign ships transiting through their territorial sea. This authority is restricted in two ways: these laws may not have the effect of limiting or encroaching on the right of innocent passage, nor may coastal states impose design, construction or crewing equipment standards.

56

Figure III(2)-1: Maritime zones



Source: Arctic Council, 2009, p. 52.

- 57 **Contiguous zone.** States may claim a 12 nm contiguous zone adjacent to the territorial sea (that is, up to 24 nm from the baseline), in which the coastal state can exercise limited control over foreign ships for the purposes of preventing and punishing the infringement of customs, fiscal, immigration or sanitation laws and regulations that apply within its territory.
- 58 **Exclusive economic zone.** The EEZ is an area beyond and adjacent to the territorial sea. It is measured from the territorial sea baseline and extends to a maximum of 200 nm. The coastal state has sovereign rights for “exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil” (Art. 56), in other words, the water column and the underlying continental shelf (see paragraph 61, below). Coastal states therefore control exploration and exploitation. This includes controlling all activities for commercial use (for example, fisheries). However, where the same fish stock or stocks of associated species occur within the EEZs of two or more coastal states, or in the coastal state’s EEZ and high seas, or is a highly migratory species listed in an Annex, the Parties are required to cooperate directly or through an appropriate regional or international organization to ensure conservation and sustainable use (Art. 63, 64). Coastal states control exploration of their EEZ, such as for the production of energy from the water, currents and wind.
- 59 In the EEZ, a coastal state also has jurisdiction over protection and preservation of the marine environment, marine scientific research, and the establishment and use of artificial islands, installations and structures (Art. 56(1)(b)).
- 60 A coastal state may regulate shipping for the purposes of pollution prevention but must do so in conformity with international rules and standards set by the IMO or under IMO conventions. Enforcement powers with respect to transiting ships in breach of these rules and standards are limited to the physical inspection of foreign ships where a violation has resulted in discharge causing or threatening significant pollution of the marine environment. The arrest and detention of foreign ships is only allowed if a violation causes or threatens to cause major damage to the coastline, interests or resources of the coastal state.

Continental shelf. The continental shelf of a coastal state comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land to the outer edge of the continental margin, or to a distance of 200 nm from the baseline where the outer edge of the continental margin does not extend to that distance (Art. 76). Over the continental shelf, coastal states exercise sovereign rights to the exploration and exploitation of natural resources, and jurisdiction over marine scientific research (Art. 77). ‘Natural resources’ for these purposes means mineral and other non-living resources of the seabed and subsoil, together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, are either immobile on or under the seabed, or are unable to move except in constant physical contact with the seabed or the subsoil (Art. 77). 61

A coastal state’s continental shelf may extend beyond 200 nm from the baseline. The portion of the continental shelf beyond the 200 nm limit is the extended continental shelf, also known as the continental margin. It comprises the submerged prolongation of the land mass of the coastal state (the continental shelf proper), and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof (Art. 76(3)). 62

States wishing to delimit the outer continental shelf beyond 200 nm may do so to a maximum of 350 nm from the territorial sea baseline, or 100 nm from the 2,500m isobath, whichever is the greatest (an isobath is the contour line on a map connecting points of equal depth). There is, however, a 350 nm limit for submarine ridges (Art. 76(6)). To formally establish these limits in international law, a state had 10 years from the time of the entry into force of UNCLOS to submit its claim to the Commission on the Limits of the Continental Shelf. The treaty text specifies the process to be used for setting the limits once a claim has been submitted: “The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding” (Art. 76(8)). 63

This continental margin presents a complex distribution of rights and responsibilities. A coastal state has exclusive rights to resources, as defined by Article 77, on or under its continental margin (its seabed and below the seabed). However, the waters above the continental margin (the water column above the continental shelf that is beyond the EEZ) are part of the high seas and are thereby beyond national jurisdiction. In other words, where the continental shelf extends beyond 200 nm from the baseline, coastal states have no jurisdiction to exploit the living resources in the water column because the waters above the seabed are considered high seas. Moreover, coastal states have no right to unilaterally control the exploitation of living resources by foreign flagged vessels in the continental margin. Coastal states may not exercise jurisdiction over foreign ships in high seas waters above the continental margin. However, they can control their own flagged vessels. All states have the right to exploit high seas living resources. 64

Coastal states may place artificial islands, installations or structures on their extended continental shelf. Safety zones may also be established around such installations, in conformity with international standards, but must not interfere with recognized sea lanes essential to international navigation. 65

High seas. The high seas comprise all parts of the sea that are not included in a country’s internal waters, territorial sea, EEZ or archipelagic waters.¹ The high seas are open to all states, whether coastal or landlocked. This freedom of the seas entails, for all states, the freedom of navigation, freedom of overflight, freedom to lay submarine cables and pipelines (subject to Part VI of UNCLOS), freedom 66

1 ‘Archipelagic waters’ refers to waters of an archipelago (a group of islands), including parts of islands, interconnecting waters and other natural features which are so closely interrelated that they form an intrinsic geographical, economic and political entity, or which historically have been regarded as such (Art. 46(b)).

to construct artificial islands and other installations permitted in international law (subject to Part VI), freedom of fishing (subject to the conditions in section 2), and freedom of scientific research (subject to Parts VI and XIII). The high seas are to be reserved for peaceful purposes and no state may lay claim to or validly purport to subject any part of the high seas to its sovereignty. The establishment and management of high seas MPAs requires an international agreement in each case.

67 **The Area.** The seabed, ocean floor and subsoil thereof, beyond the limits of national jurisdiction, form an entity known as ‘the Area’ (Art. 1(1)(1)). Part XI of the Convention is exclusively about the Area and includes definitions that apply only to the Area. In particular, the term ‘resources’ when used in relation to the Area means “all solid, liquid or gaseous mineral resources *in situ* in the Area at or beneath its seabed, including polymetallic nodules”; and ‘resources’, “when recovered from the Area, are referred to as ‘minerals’” (Art. 133). The Area and its resources are the common heritage of mankind (Art. 136). All activities related to exploration for and exploitation of the resources of the Area are administered by the International Seabed Authority.

68 **Obligation to protect and preserve the marine environment.** UNCLOS establishes an unqualified obligation on all states to protect and preserve the marine environment (Art. 192). It further specifies that states have a sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment (Art. 193). The obligation to protect and preserve the marine environment is given legal and operational context through a number of specific provisions. Furthermore, states have the general obligation, individually and jointly, to take all measures necessary, consistent with the Convention, to prevent, reduce and control pollution of the marine environment from any source, including land-based and sea-based sources (Art. 194). This requirement is explicitly extended to the conservation and management of marine living resources by the provision specifying that marine pollution measures “shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life” (Art. 194(5)).

69 The UNCLOS definition of marine pollution to cover estuaries brings that obligation to internal and territorial waters:

Pollution of the marine environment means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities (Art. 1(1)(4)).

70 Further, Article 197 requires state cooperation on a global or regional basis in formulating and elaborating rules, standards and recommended practices consistent with the Convention “for the protection and preservation of the marine environment.”

71 **Coastal state duty to manage EEZ natural resources.** A coastal state’s control over its EEZ resources, living and non-living, and over its economic activities out to its EEZ, is nearly complete (Kimball, 2003). UNCLOS spells out the rights and duties of coastal states in the EEZ to include:

(a) sovereign rights for the purpose of exploring and exploiting, *conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil*, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;

(b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:

(i) the establishment and use of artificial islands, installations and structures;

(ii) marine scientific research;

(iii) the protection and preservation of the marine environment (Art. 56(1); emphasis added).

As a result, a coastal state may establish an MPA in the EEZ but this right is limited by certain freedoms that all states have in the EEZ including the freedom of navigation.

Freedom of navigation: a challenge for MPAs. The freedom of navigation system under UNCLOS places limits on the rights of coastal states and presents a challenge for MPAs. There are different shipping rights of passage through the various ocean zones. In the EEZ, ships of all states, whether coastal or landlocked, have the freedom of navigation as an extension of the right to freedom of navigation on the high seas (Art. 58, 87). The exercise of this right must be for peaceful purposes and must take into account the rights and duties of the coastal state and applicable laws and regulations, as far as they are consistent with the Convention.

72

In the territorial sea, the powers of coastal states are much more extensive. Nevertheless, ships of all states still enjoy the right of innocent passage through territorial seas, defined as passage that is peaceful, respects the rights of the coastal state in its territorial sea, and complies with the Convention and other rules of international law.

73

If a recognized shipping lane happens to pass through an MPA established by a coastal state, the coastal state has limited powers to seek rerouting to prevent pollution or disturbance of the sea area. Where a coastal state believes a transiting foreign ship is violating applicable international rules and standards for preventing and controlling pollution, it may only undertake physical inspection where a violation has resulted in substantial discharge causing or threatening significant pollution of the marine environment. Actual arrest and detention of the foreign ship is only allowed if the violation causes major damage or threat of major damage to the coastline, interests or resources of the coastal state, and in such cases only monetary penalties may be imposed (Arctic Council, 2009, p. 52). For the purposes of MPA management, this means that action may be possible only once the damage is done, unless the site has also been designated for special international protection by the IMO.

74

The protection of MPAs from the negative impact of international shipping is available in international law by action of the IMO. This is through the international designation of a site as a particularly sensitive sea area (PSSA) or special area under IMO-related mechanisms (see section 3.1.2, below).

75

Basic principles for decision making. UNCLOS recognizes a number of foundation principles which states should apply when exercising their rights and duties. These are basic principles to be reflected in protected areas legislation generally, as discussed in Part I of these guidelines. Their emphasis in UNCLOS indicates their importance for MPA legislation as well. These principles include:

76

- **Science-based decision making.** In exercising EEZ management and conservation responsibilities over living marine resources, the coastal state must take into account the “best scientific evidence available to it” (Art. 61(2)). More broadly, states are required to cooperate in scientific studies, research, and exchange of information and data about pollution of the marine environment, and to use that knowledge to establish scientific criteria for rules, standards and recommended practices and procedures for the prevention, reduction and control of pollution of the marine environment within national jurisdiction as well as on the high seas (Art. 200, 201).
- **Environmental impact assessment (EIA).** UNCLOS requires that states assess the potential effects of planned activities under their jurisdiction or control when they have reasonable grounds for believing that they “may cause substantial pollution of or significant and harmful changes to the marine environment” (Art. 206).
- **Ecosystem approach.** UNCLOS envisions taking an ecosystem approach in its marine pollution control requirements (Art. 194).

- **Prevention and precaution.** The general obligations to protect the marine environment and prevent marine pollution, along with the broad definition of ‘pollution’, begin to introduce concepts of prevention and precaution. A supplemental implementing agreement, the 1995 Fish Stocks Agreement,² explicitly includes the precautionary principle, with several provisions directing how it should be applied (Art. 6).
- **Regional and global cooperation.** States are required to cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures for the protection and preservation of the marine environment, taking into account characteristic regional features (Art. 197). This is an important provision for the regional seas agreements and protocols that followed UNCLOS

3.1.2 International Maritime Organization rules and conventions

- 77 The IMO is the specialized agency of the UN with responsibility for overseeing international law and standards for shipping, including maritime safety, security and environmental protection (see IMO website). The IMO’s operational arm for marine environmental activities is the Marine Environment Protection Committee (MEPC), which meets every nine months. Among its activities is to develop implementation guidelines for marine environmental treaties which IMO manages, and to designate environmentally important marine areas for special protections from the negative impacts of shipping, particularly where those marine areas are in waters under national jurisdiction.
- 78 **Relevance for marine protected areas law.** PSSAs designated by the MEPC and special areas recognized under an IMO convention are the two IMO-related marine area designations and the main tools currently available to countries for giving protection from international shipping to designated or proposed deep ocean MPAs in the EEZ. Given the importance of these tools, the legal drafter needs to be familiar with the requirements for designation, should an MPA be located or planned in the EEZ. MPA legal provisions should take into consideration any legal requirements that the IMO may have for designation, and provide other supportive provisions, as necessary, to facilitate the nomination and designation of the site. These two designations are discussed further below.
- 79 **Particularly sensitive sea areas.** According to IMO guidelines, a PSSA is:

an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities. The criteria for the identification of particularly sensitive sea areas and the criteria for the designation of special areas are not mutually exclusive. In many cases a Particularly Sensitive Sea Area may be identified within a Special Area and vice versa (IMO, undated a).
- 80 The IMO Assembly at its 24th session in 2005 adopted the Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (IMO 2005 A.982(24)). These guidelines include criteria for marine areas to be designated as PSSAs, including: ecological criteria, such as a unique or rare ecosystem, diversity of the ecosystem, or vulnerability to degradation from natural events or human activities; social, cultural and economic criteria, such as significance of the area for recreation or tourism; and scientific and educational criteria, such as biological research or historical value.

2 The 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 (1995). Straddling fish stocks are those fish stocks or stocks of associated species that occur in more than one EEZ (transboundary straddling stocks) or that occur both within an EEZ (or EEZs) and in the adjacent high seas (commonly called straddling stocks) (see Kimball, 2003).

Such areas can be proposed by an IMO member state and designation takes place through action of the IMO. An application for PSSA designation should contain a proposal for protective measures aimed at preventing, reducing or eliminating the threat or identified vulnerability. When an area is approved as a PSSA, specific measures can be used to control maritime activities in that area, such as routing, strict application of discharge restrictions and equipment requirements for ships such as oil tankers, and other operational issues under the competence of the IMO. 81

The following PSSAs have been designated worldwide as of November 2009: 82

- Great Barrier Reef, Australia (designated a PSSA in 1990)
- Sabana-Camaguey Archipelago in Cuba (1997)
- Malpelo Island, Colombia (2002)
- the sea around the Florida Keys, US (2002)
- Wadden Sea, Denmark, Germany, Netherlands (2002)
- Paracas National Reserve, Peru (2003)
- Western European Waters (2004)
- extension of the existing Great Barrier Reef PSSA to include the Torres Strait (proposed by Australia and Papua New Guinea) (2005)
- Canary Islands, Spain (2005)
- Galapagos Archipelago, Ecuador (2005)
- Baltic Sea area, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (2005)
- Papahānaumokuākea Marine National Monument, US (2008).

The Papahānaumokuākea Marine National Monument, the latest PSSA designation, illustrates some of the process, and the level of collaboration between international and national authorities, involved in designating a fragile marine environment for protection. The Papahānaumokuākea Marine National Monument was initially designated by the US as a national MPA in 2006. It includes a unique, fragile and integrated coral reef ecosystem that consists of an approximately 1,200 mile stretch of small islands, atolls, banks, seamounts, pinnacles, shoals and other emergent features. The MEPC designated the PSSA in principle, pending the adoption of associated protective measures by the IMO Maritime Safety Committee. These measures were adopted in October 2007. They include expansion and amendment of six areas to be avoided (ATBAs) that had previously been designated by the IMO in 1981 to protect the North-West Hawaii Islands. In addition, a ship-reporting system has been initiated to provide critical alerts and other information to assist safe navigation in this area, and to provide information on vessel traffic in transit through the PSSA, to facilitate the ability to respond to maritime emergencies. 83

Special areas under MARPOL. The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), is one of the main IMO conventions, regulating and preventing marine pollution by ships. It covers accidental and operational oil pollution, air pollution, as well as pollution by chemicals, goods in packaged form, sewage and garbage. 84

In Annex I (Prevention of pollution by oil), Annex II (Control of pollution by noxious liquid substances) and Annex V (Prevention of pollution by garbage from ships), MARPOL defines certain sea areas as 'special areas'. Special areas are those which, for technical reasons relating to their oceanographic and ecological condition and to their sea traffic, require the adoption of mandatory measures to prevent sea pollution. Under MARPOL, special areas are provided with a higher level of protection than other areas of the sea. Guidelines for designation of special areas under MARPOL were adopted by the IMO 22nd Assembly in 2001 (IMO 2001 A.927(22)). Special areas under MARPOL are listed in Table III(2)-2. 85

Table III(2)-2: Special areas under MARPOL

Area	Adopted #	Entry into force	In effect from
Annex I: Oil			
Mediterranean Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Baltic Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Black Sea	2 Nov 1973	2 Oct 1983	2 Oct 1983
Red Sea	2 Nov 1973	2 Oct 1983	*
'Gulfs' area	2 Nov 1973	2 Oct 1983	1 Aug 2008
Gulf of Aden	1 Dec 1987	1 Apr 1989	*
Antarctic area	16 Nov 1990	17 Mar 1992	17 Mar 1992
North West European Waters	25 Sept 1997	1 Feb 1999	1 Aug 1999
Oman area of the Arabian Sea	15 Oct 2004	1 Jan 2007	*
Southern South African waters	13 Oct 2006	1 Mar 2008	1 Aug 2008
Annex II: Noxious liquid substances			
Antarctic area	30 Oct 1992	1 Jul 1994	1 Jul 1994
Annex V: Garbage			
Mediterranean Sea	2 Nov 1973	31 Dec 1988	1 May 2009
Baltic Sea	2 Nov 1973	31 Dec 1988	1 Oct 1989
Black Sea	2 Nov 1973	31 Dec 1988	*
Red Sea	2 Nov 1973	31 Dec 1988	*
'Gulfs' area	2 Nov 1973	31 Dec 1988	1 Aug 2008
North Sea	17 Oct 1989	18 Feb 1991	18 Feb 1991
Antarctic area (south of latitude 60 degrees south)	16 Nov 1990	17 Mar 1992	17 Mar 1992
Wider Caribbean region including the Gulf of Mexico and the Caribbean Sea	4 July 1991	4 Apr 1993	*
Annex VI: Prevention of air pollution by ships (SOx emission control areas)			
Baltic Sea	26 Sept 1997	19 May 2005	19 May 2006
North Sea	22 July 2005	22 Nov 2006	22 Nov 2007
#	Status of multilateral conventions and instruments in respect of which the international maritime organization or its secretary general perform depositary or other functions as at 31 December 2002.		
*	The special area requirements for these areas have not taken effect because of lack of notifications from MARPOL Parties whose coastlines border the relevant special areas on the existence of adequate reception facilities (regulations 38.6 of MARPOL Annex I and 5(4) of MARPOL Annex V).		
<i>Source: IMO, undated b.</i>			

86 A recent action by the MEPC illustrates the growing importance and critical value for national MPAs of the special areas designation. At its 56th session in 2007,

The [MEPC] adopted a resolution setting a date of 1 August 2008 for the discharge requirements in “the Gulfs area” (a Special Area under MARPOL Annexes I and V) to take effect. The area was established as a Special Area in 1973, when the Convention was adopted, but the discharge requirements therein could not take effect until States in the area had ratified the Convention and provided adequate reception facilities.

Following a 10-year regional project on the implementation of MARPOL, organized and administrated by ROPME/MEMAC [Regional Organization for the Protection of the Marine Environment Marine Emergency Mutual Aid Centre], with support [from] IMO's technical co-operation programme, all the States in "the Gulfs area" have now ratified MARPOL and have provided adequate reception and treatment facilities for Annex I and Annex V ship-generated wastes in ports, terminals and ship repair ports in the area (IMO, 2007).

3.2 International conservation treaties

It is worthwhile for the legal drafter to be familiar with the basic obligations and concepts of international and regional treaties as they relate specifically to MPAs. This section highlights key CBD obligations, principles and policy guidance associated with marine biodiversity conservation. It also briefly reviews marine conservation-related provisions in the Ramsar Convention and the World Heritage Convention. Regional seas programmes and other regional instruments are then discussed to highlight important regional obligations that may have legal implications. The purpose is to emphasize the importance for the legal drafter to be familiar with all such instruments to which the country is or may become a Party for commitments and obligations to incorporate in MPA legal provisions. (International and regional treaties and policy instruments of general application to protected areas legislation are reviewed in Part I.)

87

3.2.1 Convention on Biological Diversity

Several decisions of the CBD Conference of the Parties in recent years have set forth goals, actions, guidelines and criteria that Parties are urged to apply when establishing and managing MPAs in order to advance and be in accordance with the objectives of the Convention. These decisions have consequences for MPA legislation because they contain policy, principles, processes and actions that should be supported by legislation wherever possible.

88

Box III(2)-6: CBD Programme of Work on Marine and Coastal Biodiversity—MPAs and national legislation

The CBD Programme of Work on Marine and Coastal Biodiversity gives special attention to marine and coastal protected areas:

Programme element 3: Marine and coastal protected areas

Goal: The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network of marine and coastal protected areas, building upon national and regional systems, including a range of levels of protection, where human activities are managed, *particularly through national legislation*, regional programmes and policies, traditional and cultural practices and international agreements, to maintain the structure and functioning of the full range of marine and coastal ecosystems in order to provide benefits to both present and future generations. [...]

Operational objective 3.3: To achieve effective management of existing marine and coastal protected areas

Suggested activities

(a) To achieve effective management of marine and coastal protected areas *through good governance, clear legal or customary frameworks* to prevent damaging activities, effective compliance and enforcement, ability to control external activities that affect the marine and coastal protected area, strategic planning, capacity building, and sustainable financing.

(b) To address, through appropriate integrated marine and coastal management approaches, all threats, including those arising from the land (e.g. water quality, sedimentation) and shipping/transport, in order to maximize the effectiveness of marine and coastal protected areas and networks in achieving their marine and coastal biodiversity objectives taking into account possible effects of climate change such as rising sea levels.

(c) To facilitate relevant stakeholder and indigenous and local community participation as an essential component of implementing operational objective 3.3.

Source: CBD COP 2004 VII/5; *emphasis added*.

- 89 The CBD articulated marine and coastal biodiversity as a topic of special concern at the First Meeting of the Conference of the Parties to the CBD, in 1994 (CBD COP 1994 I/9). The Second Meeting of the Conference of the Parties, in 1995, adopted what came to be known as the Jakarta Mandate on Marine and Coastal Biodiversity, a programme of action for the conservation and sustainable use of marine and coastal biodiversity (CBD COP 1995 II/10). Reflecting their deep concern about the serious threats to marine and coastal biodiversity, the Parties called for the development of a programme of work to reduce threats to and advance conservation and sustainable use of marine and coastal biodiversity.
- 90 **Relevance for marine protected areas law.** The CBD Conference of the Parties adopted a Programme of Work on Protected Areas in 2004, which contains principles, goals and actions applicable to all protected areas (see Part I, section 5.1.1). In 1998, the Conference of the Parties had before it a separate programme of work for marine and coastal biodiversity, as called for in its earlier decision. This programme of work was adopted by the Parties in 1998 (CBD COP 1998 IV/5) and was significantly updated in 2004 (CBD COP 2004 VII/5) (see Box III(2)-6).

Table III(2)-3: CBD guidance on marine and coastal protected areas and networks

Scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in open-ocean waters and deep-sea habitats (Annex I)	Scientific guidance for selecting areas to establish a representative network of marine protected areas, including in open ocean waters and deep-sea habitats (Annex II)
<p>Criteria</p> <ul style="list-style-type: none"> • Uniqueness or rarity—with respect to (1) endemic species, populations or communities, (2) habitats or ecosystems, or (3) unusual geomorphological or oceanographic features • Special importance for life history stages of species—required for a population to survive and thrive • Importance of threatened, endangered or declining species and/or habitats—containing habitat for survival or recovery of endangered, threatened or declining species, or areas with significant assemblages of such species • Vulnerability, fragility, sensitivity or slow recovery—relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile or with slow recovery • Biological productivity—containing species, populations or communities with comparatively higher natural biological productivity • Biological diversity—comparatively higher diversity of ecosystems, habitats, communities or species, or higher genetic diversity • Naturalness—comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation 	<p>Required network properties and components</p> <ul style="list-style-type: none"> • Ecologically and biologically significant areas—geographically or oceanographically discrete areas with important services to one or more species/populations of an ecosystem or to the ecosystem as a whole, as compared to other surrounding areas or areas of similar ecological characteristics • Representativity—when the network consists of areas representing different biogeographical subdivisions of the global oceans and regional seas that reasonably reflect the full range of ecosystems, including biotic and habitat diversity • Connectivity—to allow linkages whereby protected sites benefit from larval and/or species exchanges, and functional linkages from other network sites (i.e., individual sites benefit one another) • Replicated ecological features—more than one site in the given biogeographic area containing examples of a given feature or features (species, habitats and ecological processes) that naturally occur in that area • Adequate and viable sites—all sites within a network should have size and protection sufficient to ensure the ecological viability and integrity of the features for which they were selected
<p><i>Source: Adapted from CBD COP 2008 IX/20, Annex I and Annex II.</i></p>	

- 91 The CBD Programme of Work on Marine and Coastal Biodiversity was guided by a technical report specifically addressing marine and coastal protected areas, prepared by an ad hoc committee (SCBD, 2004b). The report gave a strong scientific basis for countries to establish marine and coastal protected areas to meet their biodiversity goals and obligations under the CBD. It stated unequivocally that the use of marine and coastal protected areas was the “only method” to maintain marine ecosystems in a

truly natural state in response to CBD requirements to protect or restore ecosystems, natural habitats and species populations (SCBD, 2004b, p. 9). The report concluded that such types of protected areas were an essential element of the management of biological diversity and were essential for coastal countries to provide a complete protected area network covering all ecosystems (SCBD, 2004b, p. 9).

Subsequently, the Ninth Meeting of the Conference of the Parties to the CBD, in 2008, went considerably further with its guidance on MPAs, adopting a decision that essentially defined what would comprise a network of MPAs (CBD COP 2008 IX/20). This decision contains scientific guidance on the required properties and components for a site to be part of an MPA network, including in open-ocean waters and deep-sea habitats (Annex II). The decision also adopts scientific criteria for identifying ecologically or biologically significant marine areas in need of protection in open-ocean waters and deep-sea habitats (Annex I). Recalling a decision of the Eighth Meeting of the Conference of the Parties, which recognized that the application of tools beyond and within national jurisdiction need to be coherent, compatible and complementary (CBD COP 2006 VIII/24), the 2008 decision urges Parties to apply the scientific criteria and guidance with a view to establishing representative networks of MPAs (CBD COP 2008 IX/20, para. 18). 92

For the purposes of MPA legislation, the most important elements of these annexes are the criteria for selecting sites, and the required properties and components of an MPA network (see Table III(2)-3). These elements reinforce several principles relevant to protected area systems and networks overall, as laid out in Part I and elaborated in Part III, Chapter 1. 93

The 2008 COP decision adopting these guidelines underscores their importance as the latest scientific and policy consensus with respect to MPAs. They reflect elements that the legal drafter should consider incorporating in provisions of MPA legislation related to selecting individual sites and establishing MPA networks. 94

3.2.2 Ramsar Convention

The Ramsar Convention sets out the obligation for countries to promote the conservation of wetlands by pursuing compatible land use planning and other measures such as establishing nature reserves (see Part I, section 5.1.3). For countries that are Parties to the Ramsar Convention, marine and coastal protected areas are a major tool for advancing compliance with this treaty. 95

Relevance for marine protected areas law. The Ramsar Convention defines wetlands to include areas “with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres” (Art. 1). This covers most coastal zones around the world. 96

In 2002, Parties to the Ramsar Convention adopted ‘New Guidelines for the management planning of Ramsar sites and other wetlands’. These guidelines focus on the site-based scale of management planning, recognizing that site planning should be one element of a multi-scale approach to wise use planning and management of wetlands. The emphasis is on the need for wetland site management to be integrated with broad-scale landscape and ecosystem planning, including at the integrated river basin and coastal zone scale, because policy and planning decisions at these scales will affect the conservation and wise use of wetland sites (Ramsar COP 2002 VIII.14, Annex, para. 5, 14–27). 97

The ‘Principles and guidelines for incorporating wetland issues into Integrated Coastal Zone Management (ICZM)’, also adopted in 2002, identify governance as an important element for advancing an ICZM approach. Importantly, the guidelines identify the need for supportive legal and institutional 98

frameworks that can minimize and resolve jurisdictional overlaps in coastal zones when applying the ICZM approach. Recognizing that many stakeholders use coastal wetlands, the guidelines emphasize the need for all stakeholders to fully participate in decisions related to coastal zone management planning. The guidelines highlight three kinds of issues where stakeholder participation is particularly important:

- (a) issues that are the responsibility of a particular stakeholder, for example, a port authority, often carrying out a statutory legal duty;
- (b) issues that are the responsibility of a particular stakeholder or several stakeholders (local fishing communities), who would benefit from the exchange of information to increase understanding and awareness; and
- (c) issues, for example, the impact of climate change and sea level rise, that can affect all stakeholders but are the responsibility of none, and for which it is advantageous to develop responses through an integrated approach (Ramsar COP 2002 VIII.4, Annex, para. 16).

3.2.3 World Heritage Convention Marine Programme

99 The World Heritage Convention focuses on natural and cultural properties of outstanding universal value for recognition as world heritage sites. Marine sites come within the scope of the Convention (see Part I, section 5.1.2). The Operational Guidelines for the Convention provide that listed sites may include property “representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals” (UNESCO, 2008b, para. 77).

Box III(2)-7: Convention on the Protection of the Underwater Cultural Heritage

In 2001, UNESCO concluded a new treaty, the Convention on the Protection of the Underwater Cultural Heritage. Following deposit of the 20th instrument of acceptance, the Convention entered into force in January 2009. This action was in response to provisions of UNCLOS which oblige States Parties to protect underwater cultural heritage under the term “archaeological and historical objects”, but leaves international regulation regarding underwater cultural heritage to other forthcoming instruments. In 1996, member states of UNESCO resolved to develop a legally binding treaty which resulted in the Convention text adopted by the UNESCO General Conference in 2001.

The new Convention sets a high international standard for the protection of underwater heritage. The Convention consists of a comprehensive legal framework and protection regime providing appropriate legal, administrative and operational measures to be adopted by States Parties.

For countries that have already ratified the Convention, or intend to do so, the legal drafter should review its provisions as part of the process of formulating MPA legislation. The Convention defines ‘underwater cultural heritage’ to mean:

all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years such as:

- (i) sites, structures, buildings, artefacts and human remains, *together with their archaeological and natural context*;
- (ii) vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, *together with their archaeological and natural context*; and
- (iii) objects of prehistoric character (Art. 1; emphasis added).

The Convention text includes an annex that sets out ‘Rules concerning activities directed at underwater cultural heritage’. Its main principles include an obligation of Parties to preserve underwater cultural heritage and take action according to their capabilities. It also considers in-situ conservation of underwater cultural heritage as the first and preferred option.

Source: *Convention on the Protection of the Underwater Cultural Heritage (2001)*.

In recent years, the listing of marine sites has received increased attention because such areas have been significantly under-represented in the World Heritage List. Currently, of the 180 natural and 27 mixed sites worldwide, the World Heritage Marine Programme lists 43 marine sites (UNESCO, 2010b). The World Heritage Committee approved a World Heritage Marine Programme in 2005 to more aggressively promote the nomination of large-scale marine areas and MPA networks, including transboundary nominations (that is, nominated by more than one state). The action was intended to give increased attention to marine areas needing protection from such growing threats as overfishing, inappropriate fishing practices, coastal development and pollution. Nominations can only be within the EEZ. 100

These actions at the international level add further policy support for countries to establish and nominate MPAs of outstanding universal value as part of their responsibility under the Convention. The World Heritage Marine Programme's mission is "to establish effective conservation of existing and potential marine areas of Outstanding Universal Value" (UNESCO, 2010b). To achieve this, the Programme focuses on three key goals: (1) strengthen credibility of the World Heritage List, (2) strengthen the conservation of marine world heritage sites through capacity building, and (3) strengthen communications and outreach about the World Heritage Convention as an instrument for marine conservation. 101

Underwater cultural heritage. A new international treaty, the Convention on the Protection of the Underwater Cultural Heritage (2001), entered into force in 2009, largely as an international response to growing incidents worldwide of looting and destruction of underwater cultural heritage. Administered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the Convention aims to strengthen protection and preservation in situ of underwater cultural heritage together with the natural site where such artefacts are located. A major mechanism for implementing this Convention is the MPA. Where a country has ratified the Convention or may do so in the future, it will be worthwhile for the legal drafter to become familiar with its provisions and to incorporate the relevant elements into the MPA legislation (see Box III(2)-7). 102

3.3 Regional agreements

This section highlights a number of important regional treaties and programmes specifically focused on MPAs, under which participating states assume commitments and obligations that need to be taken into account in national MPA networks and associated legislation. These instruments range from those that focus entirely on the creation of MPAs at the national or transboundary level, to others that trigger MPA obligations as part of a broader obligation to protect threatened habitats and species in both terrestrial and marine environments. 103

3.3.1 Regional Seas

The Regional Seas Programme was launched by the UNEP in 1974. The Programme has grown significantly over the years and has gained recognition for its efforts to guide and promote MPAs at the national and transboundary levels. The 1972 United Nations Conference on the Human Environment first recommended the regional seas concept. Since then, the Regional Seas Programme has resulted in the development of several regional action plans, legally binding agreements and protocols, as well as policy guidance on specific areas of environmental concern. 104

The Mediterranean became the first region to adopt an action plan in 1975, replaced by a revised plan in 1995. The region was also the first to adopt a convention to implement the action plan, entitled Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention) 105

(1976), which entered into force in 1978. This Convention was revised in 1995 as the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, which came into force in 2004. This was followed by a series of protocols (legally binding agreements directly related to the main convention) in specific areas of environmental concern, and the creation of Regional Activity Centres responsible for implementation. The Mediterranean Regional Seas Programme set the pattern of development for regional seas programmes to follow.

- 106 Today the Regional Seas Programme covers 18 regions of the world. Thirteen of these programmes have been established under the auspices of UNEP, with more than 140 countries participating. These programmes are: Black Sea, Wider Caribbean, East Asian Seas, Eastern Africa, South Asian Seas, ROPME (Regional Organization for the Protection of the Marine Environment) Sea Area, Mediterranean, North-East Pacific, North-West Pacific, Red Sea and Gulf of Aden, South-East Pacific, Pacific, and Western Africa. In addition, five independent partner programmes for the regions of the Antarctic, Arctic, Baltic Sea, Caspian Sea and North-East Atlantic Regions are members of the Regional Seas family.
- 107 Of the 13 Programmes established under the auspices of UNEP, nine regions in addition to the Mediterranean region have developed legally binding conventions: Black Sea, East Africa, North-East Pacific, South Pacific, Red Sea and Gulf of Aden, ROPME Sea Area, South-East Pacific, Western Africa, and Wider Caribbean.
- 108 Most Regional Seas programmes with legally binding conventions have also adopted legally binding protocols under these conventions in various areas of special concern, including oil pollution, land-based pollution and protected areas. These protocols reflect the action-oriented commitments of countries to marine and coastal conservation through protected areas and other means that require national legislation for implementation. Protected areas legal frameworks in coastal and island states supported by such protocols should take into account and, as appropriate, incorporate the relevant principles, obligations and procedures of the Regional Seas protocols and any associated guidelines.
- 109 Among the UNEP-administered programmes, three have adopted protected area protocols: the Mediterranean, East African and Caribbean regions. (For further information, see the UNEP Regional Seas Programme website.)
- 110 The **Mediterranean** Regional Seas programme was the first to adopt a protocol for specially protected areas and is the only programme to date that has updated the original protocol. The first protocol that set the pattern for those to come was entitled Protocol Concerning Mediterranean Specially Protected Areas (1982), which came into force in 1986. That instrument was subsequently replaced by a new protocol, the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA and Biodiversity Protocol) (1995), which came into force in 1999. The SPA and Biodiversity Protocol, adopted shortly after the CBD came into force, is the first protocol of the UNEP-administered programmes to incorporate the CBD definition of biological diversity. Continuing the pattern set by earlier protocols, the SPA and Biodiversity Protocol provides for the establishment of a list of specially protected areas of Mediterranean importance (SPAMI). It specifies that areas to be listed as specially protected must be areas of “importance for conserving the components of biological diversity in the Mediterranean [or areas that] contain ecosystems specific to the Mediterranean area or the habitats of endangered species” (Art. 8(2)).
- 111 Of special significance, the SPA and Biodiversity Protocol also provides for the possibility of protected areas in the high seas to be recognized. A portion of the Mediterranean Sea has the status of high seas because only a few of the 21 countries bordering the Mediterranean have declared EEZs under

UNCLOS. This means that the legal mechanisms countries have available for biodiversity protection in the Mediterranean in most cases extend only to the limits of their national territorial seas, a maximum of 12 nm seaward, leaving much of the Mediterranean Sea without the legal tools for biodiversity conservation that are available to states which have declared EEZs.

The SPA and Biodiversity Protocol recognizes this problem. It provides that areas listed as SPAMIs may include areas under the national jurisdiction of one Party, as well as areas established by two or more neighbouring Parties and situated “partly or wholly on the high sea” (Art. 9(2)). Fourteen countries and the European Community are Contracting Parties to this Protocol. A number of protected areas have been listed as SPAMIs under this Protocol, including the world’s first trilaterally established MPA covering both national waters and the high seas, the Pelagos Sanctuary (see Box III(2)-8).

112

The **Eastern African** region was the second to adopt a protected areas protocol. The Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region (East African Protocol) (1989) came into force in 1996 and remains as originally concluded. Illustrative of the original legislative requirements laid down in this protocol and followed by most subsequent regional initiatives, the East African Protocol provides that Contracting Parties shall, where necessary, establish protected areas in areas under their jurisdiction with a view to safeguarding the natural resources of the Eastern African region and shall take all appropriate measures to protect these areas (Art. 8).

113

Box III(2)-8: The Mediterranean Pelagos Sanctuary—a high seas transboundary MPA

In 1999, France, Italy and Monaco signed the Agreement Concerning the Creation of a Marine Mammal Sanctuary in the Mediterranean. In 2001, Parties to the SPA and Biodiversity Protocol under the Barcelona Convention placed the Sanctuary on the SPAMI List, an essential step committing Parties to respect the protected status of the MPA, including its high seas portion. In 2002, the agreement, which became commonly known as the Pelagos Sanctuary Agreement, entered into force, thus providing the first and only example of a legally designated transnational high seas MPA. The Sanctuary waters include the Ligurian Sea and parts of the Corsican and Tyrrhenian Seas. The initiative, according to analysts, “set a precedent for the implementation of pelagic protected areas on the high seas” (Notarbartolo di Sciarra et al., 2008).

The Pelagos Sanctuary encompasses over 87,500 sq km of internal, territorial and adjacent high seas waters between south-eastern France, Monaco, north-western Italy and northern Sardinia, and surrounding Corsica and the Tuscan Archipelago (see Figure A). Originally envisioned for the protection of endangered and endemic whales and dolphins, the sanctuary also provides protection to other species by the fact that they share the same ecosystem (for example, the Mediterranean devil ray, the basking shark and many species of large pelagic fish). Its design was defined primarily by natural, as contrasted with political, considerations, thus serving as an example of ecosystem-driven design for a transboundary MPA.

From a legal perspective, the Pelagos Sanctuary Agreement is a relatively straightforward transboundary MPA agreement. It prohibits the deliberate “taking” (defined as hunting, catching, killing or harassing) or disturbance of marine mammals, and obliges Contracting Parties to take measures to “ensure the favourable conservation status of marine mammals, by protecting both them and their habitat, from any negative direct or indirect impacts resulting from human activities.” Such measures include regular assessments of population status and threats, phasing out toxic pollution in the sanctuary, monitoring, research and awareness building. To advance these commitments, France has established and is managing ecological protection zones within its national waters, and Italy has begun to take similar steps.

The Sanctuary Agreement’s international reach is mainly in a provision reflecting the commitment of the three signatory states to invite other states or international organizations undertaking activities within the area to take similar protection measures. These measures are to take into account “the Action Plan adopted within the UNEP/MAP framework for the conservation of cetaceans in the Mediterranean and the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area, or any other pertinent treaty” (Art. 17).



Figure A: The Pelagos Sanctuary



Source: *Tethys Research Institute, undated.*

As noted above, an important step was taken towards regional and international recognition of the sanctuary in 2001 when it was listed as a SPAMI under the SPA and Biodiversity Protocol. That action moved the legal commitment beyond the three signatory states and their national waters to all Contracting Parties to the Protocol. Until the current management plan adopted in 2007 becomes operational, management is being undertaken on the basis of implementation decisions by Conferences of the Parties.

There are signs of progress with recognition of the sanctuary. The Italian navy decided to refrain from conducting naval exercises (involving the use of ordnance or sonar) in the sanctuary area, and the Italian Ministry of the Environment discontinued the discharge in sanctuary waters of toxic mud dredged from the area's harbours. Implementing Agreement prohibitions on offshore high-speed motor races, and the adoption of rules and codes of conduct for whale watching, have helped improve the habitat and safe movement of species. Participating countries have begun to designate funds specifically for marine conservation. Efforts are underway to have the sanctuary designated as a PSSA under IMO, and as a world heritage site under the World Heritage Convention, in order to further extend recognition and protection with respect to the Mediterranean operations of all countries.

According to experts, the sanctuary, if successful over the long term, will emerge as a demonstration model for large-scale, ecosystem-based high seas MPAs, the utility of regional seas agreements, the use of species as 'umbrellas' to protect whole ecological communities, and the role of individuals in carrying forward a conservation vision (Notarbartolo di Sciara et al., 2007).

For further information, see the Sanctuary Agreement.

Contributed by Tanya Baycheva.

- 114 The East African Protocol is explicit about the kinds of legislative protections that may be required in national legislation. Article 10 (Protective Measures) calls for the Contracting Parties to take measures

required to achieve the objectives of a designated protected area consistent with its characteristics, including prohibitions and regulations on the dumping of waste, the use of pleasure craft, fishing and hunting, capture of animals and harvesting of plants, any activity involving exploration or exploitation of the seabed or subsoil, any archaeological activity, the removal of any object, and any other measures to safeguard ecological and biological processes in protected areas.

The **Wider Caribbean** is the third Regional Seas Programme among those administered by UNEP to have adopted a protected areas protocol. The Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (1990) came into force in 2000. Parties have a general obligation to “take necessary measures to protect, preserve and manage in a sustainable way areas that require protection to safeguard their special value, and threatened or endangered species of flora and fauna” (Art. 3). To that end, Parties are to establish protected areas “with a view to sustaining the natural resources of the Wider Caribbean Region, and encouraging ecologically sound and appropriate use, understanding and enjoyment of these areas, in accordance with the objectives and characteristics of each” (Art. 4). Lists of protected areas are to be compiled based on criteria and guidelines developed by the Contracting Parties. Buffer zones, regulating the introduction of non-indigenous species, and EIA concepts also are recognized.

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The Caribbean Protocol enumerates criteria to be used in establishing protected areas. Parties are to select sites to conserve, maintain and restore, in particular:

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- representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain biological and genetic diversity;
- habitats and their associated ecosystems critical to the survival and recovery of endangered, threatened or endemic species of flora or fauna;
- the productivity of ecosystems and natural resources that provide economic or social benefits and upon which the welfare of local inhabitants is dependent; and
- areas of special biological, ecological, educational, scientific, historic, cultural, recreational, archaeological, aesthetic or economic value, including particular areas whose ecological and biological processes are essential to the functioning of the Wider Caribbean ecosystems (Art. 4(2)).

Legal drafters in the Black Sea region may want to research a new protocol on protected areas that has been adopted by that Regional Seas Programme. Entitled the Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution, this instrument was signed in Sofia, Bulgaria, in 2002, and has not yet come into force.

117

3.3.2 OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) was concluded in 1992. The OSPAR Convention is the mechanism by which 15 states of the western coasts and catchments of Europe, together with the European Community, cooperate to protect the marine environment of the North-East Atlantic. The 15 states are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK. A representative of each comprises the OSPAR Commission, the decision-making body of the Contracting Parties, which meets annually.

118

Annex V of the Convention addresses the ‘Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area.’ Article 3(1)(b)(ii) makes it a duty of the Commission to “develop means,

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consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites or related to particular species or habitats.” Contracting Parties report annually on progress with sites and site selection. A selected site requires a management plan prepared in accordance with OSPAR Convention guidelines.

- 120 In 1998, OSPAR Ministers agreed to promote the establishment of a network of MPAs and in 2003 they adopted a recommendation which set the target of 2010 for establishing in the OSPAR region a joint network of well-managed MPAs that, together with the Natura 2000 network, would be ecologically coherent (OSPAR 2003/03).
- 121 By 2007, most OSPAR-nominated sites were Natura 2000 sites. Slow progress in developing distinct OSPAR sites prompted the OSPAR Commission at its 2007 meeting to endorse a recommendation that “Contracting Parties should begin the process of identifying and selecting sites beyond existing Natura 2000 areas” (OSPAR Commission, 2008, p. 5). The vast majority of sites were also within the territorial waters of the Contracting Parties. Further recommendations encouraged the development of OSPAR MPAs in deepwater areas, including the high seas. In such areas, especially, the OSPAR network could have the important role of helping build connectivity conservation areas at the transnational level between national MPA networks (see Box III(2)-9).

Box III(2)-9: OSPAR and transnational MPA networks

The OSPAR maritime area includes the internal waters, territorial seas and EEZs of the Contracting Parties, as well as a portion of the high seas. The area is defined in the Convention to comprise the North-East Atlantic extending westward to the east coast of Greenland, eastward to the continental North Sea coast, south to the Straits of Gibraltar and northward to the North Pole. The area includes the seabed and subsoil and covers approximately 13.5 million sq km, or about 4 per cent of the surface area of the earth’s oceans. As such, this instrument has significant potential to promote MPAs on a regional and transnational scale.

Guidelines under the Convention provide criteria and a process for Contracting Parties to follow to determine if sites justify selection as MPAs under the OSPAR Convention. Ecological as well as practical factors (legal, political, feasibility of implementation) are to be taken into account, in addition to how the MPA would advance OSPAR network objectives. These objectives are: (1) protect, conserve and restore species, habitats and ecological processes that are adversely affected as a result of human activities; (2) prevent degradation of and damage to species, habitats and ecological processes, following the precautionary principle; and (3) protect and conserve areas that best represent the range of species, habitats and ecological processes in the OSPAR maritime area.

The OSPAR Convention area encompasses marine areas beyond national jurisdiction. In that regard, the OSPAR Commission has agreed to consider proposals from Contracting Parties and observers on possible components of the OSPAR network of MPAs in areas of the North-East Atlantic outside the jurisdiction of the Contracting Parties, and where appropriate consider with other authorities how such areas could be protected. Such considerations have the potential for transnational MPAs involving marine areas both within and beyond national jurisdiction. Reiterating the importance of protecting deep waters, the OSPAR Commission emphasizes that “sites further offshore and especially in the Contracting Parties’ EEZs should be selected” (OSPAR Commission, 2008, p. 5). In 2008, the OSPAR Commission agreed to undertake further work to establish an OSPAR MPA for the Charlie Gibbs Fracture Zone on the Mid-Atlantic Ridge. OSPAR continues to assess other areas beyond national jurisdiction to determine if they justify protection under the Convention.

For further information, see OSPAR Commission website.

Contributed by Gordon McGuire.

3.3.3 Helsinki Convention and OSPAR Convention

- 122 The Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) (1992) came into force in 2000, with amendments that came into force in 2008. The Helsinki Commission (HELCOM) is the governing body of the Convention. The Contracting Parties to the Convention are Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and

Sweden. The main aim of the Convention is to “prevent and eliminate pollution in order to promote the ecological restoration of the Baltic Sea Area and the preservation of its ecological balance” (Art. 3).

In 2003, HELCOM on behalf of the Baltic Sea Convention and the OSPAR Commission on behalf of the OSPAR Convention concluded a joint work programme on MPAs. This programme links the MPAs of both conventions in an effort to ensure ecological coherence, and to develop the common theoretical and practical aspects of what would constitute a joint network. The programme includes developing guidance on the application of each agreement in this context. Legal drafters in countries to which the Helsinki Convention applies will also want to review the guidance being generated by these two Commissions for elements that may be important to incorporate in marine provisions of protected areas legislation.

123

3.3.4 ACCOBAMS

The Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) (1996) is a regional agreement which was adopted within the framework of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) (1979). The purpose of the agreement is to reduce threats to cetaceans in the Mediterranean, Black Sea waters and a contiguous Atlantic area, and to improve knowledge about these animals. ACCOBAMS provides for the use of MPAs as a tool to achieve its purposes.

124

Article II (Purpose and Conservation Measures) provides:

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1. Parties shall take co-ordinated measures to achieve and maintain a favourable conservation status for cetaceans. To this end, Parties shall prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans and shall co-operate to create and maintain a network of specially protected areas to conserve cetaceans.

The Annex 2 (Conservation Plan) provides further guidance on the actions Parties are to take to achieve the objectives of ACCOBAMS. These include adopting appropriate national legislation and establishing MPAs within the framework of other appropriate regional legal frameworks:

126

The Parties shall undertake, to the maximum extent of their economic, technical, and scientific capacities, the following measures for the conservation of cetaceans, giving priority to conserving those species or populations identified by the Scientific Committee as having the least favourable conservation status, and to undertaking research in areas or for species for which there is a paucity of data. [...]

Parties shall endeavour to establish and manage specially protected areas for cetaceans corresponding to the areas which serve as habitats of cetaceans and/or which provide important food resources for them. Such specially protected areas should be established within the framework of the Convention for the Protection of the Mediterranean Sea against Pollution, 1976, and its relevant protocol, or within the framework of other appropriate instruments.

3.3.5 Natura 2000

The European Union (EU) Birds Directive (1979, as amended in 2009) and Habitats Directive (1992), which generated the Natura 2000 legal framework, require Member States to establish special protection areas for birds and special areas of conservation (SACs) for other species in order to maintain or restore to a favourable conservation status natural habitat types and habitats of species of Community interest (see Part I, section 5.3). In 2005, the European Court of Justice issued a judgment to the effect that these Directives, and especially the Habitats Directive, are applicable and must be implemented in a Member State’s EEZ (Case C-6/04, ECJ, 20 October 2005). In other words, the Court found that Member States are obliged to designate SACs under the Habitats Directive in their EEZs and to provide species protection in that zone as laid down in the Directive.

127

- 128 As a result, in 2007 the Commission of the European Communities issued guidelines on how to implement the Directives with respect to the EEZ. The ‘Guidelines for the establishment of the Natura 2000 network in the marine environment’ (European Commission, 2007), include discussion of different marine zones, legal aspects for implementing environmental legislation in the marine environment, marine habitat types, and how to locate and select marine Natura 2000 sites.
- 129 Legal drafters in EU Member States should be familiar with these guidelines as background to formulating legal provisions for designating MPAs out to their EEZs in order to be in compliance with these Directives.

4 Incorporating marine principles in legislation

- 130 Today it is generally accepted by scientists, managers and policy makers alike that MPAs require special legal consideration to address their unique features. Countries are increasingly enacting legislation that is more responsive to the needs and challenges of marine ecosystems management. Legislative approaches vary, from integrating marine provisions into principal protected areas legislation as a separate chapter or part, to enacting distinct legislation for the MPA system or specific sites, or some combination. The legislative approach appropriate for a particular country should be responsive to its international obligations, the scientific and management needs of the current and envisioned MPA system, and the existing policy framework and institutional capacity. Regardless of the legislative approach, in order for a country to most effectively meet its national and global commitments to biodiversity conservation, MPAs should be planned, established and managed as part of the formal system of protected areas.
- 131 Several generic legal elements specific to marine and coastal protected areas are discussed below. These should be considered by the legal drafter in conjunction with companion sections in Part III, Chapter 1.

4.1 Legal drafting preparations

- 132 **Legal and institutional inventory and analysis.** A preliminary task for the legal drafter is to undertake a legal and institutional inventory and analysis of relevant law and policy (see Part III, Chapter 1, section 1). Where countries have coastal and marine zones, the considerations discussed in that section apply to MPAs as well as to terrestrial protected areas. In addition, a few points specifically related to the marine focus of protected areas legislation are worth highlighting here.
- 133 At the policy level, a number of decisions will be important for guiding the scope and content of marine provisions to ensure that they are supportive not only for current needs but also for the future. In many countries the development of MPAs has lagged behind that of terrestrial protected areas (a global phenomenon as discussed in the introduction to this chapter). This means that the potential and need for growth to meet national MPA targets is likely to be high.
- 134 It is important for MPA legislation to be guided by the desired conservation objectives and configuration of sites, and not solely by the needs of existing sites or by the purpose of maintaining the status quo. This is particularly relevant for countries in the early stages of MPA network building. The legislation should be designed to accommodate the full range of MPA categories envisioned for the network, provide for adequate institutional powers and responsibilities to effectively manage this network, and allow for recognition of new governance approaches that might be available. Policy makers and

protected area authorities should provide early input to the legal drafter on the vision, mission, goals and objectives for the current and planned MPA network that the legislation is intended to support.

Specific legal questions. Following good legal practice, the legal drafter should identify and review existing statutes, regulations, subsidiary legislation, judgments, and customary and traditional practices or rights which have been legally recognized. 135

The scope of such an analysis should be guided by the needs of existing MPAs and the nature and range of additional needs as the MPA network is further developed in the country or jurisdiction. That information, as far as possible, should be provided by the relevant protected areas authority, or developed jointly by the legal drafter and protected areas authority. As part of the pre-drafting preparations, the legal drafter requires certain basic scientific and technical information, such as: 136

- (a) overall MPA network envisioned for marine and coastal protected areas, and anticipated strategy for building the network (to the extent known);
- (b) overall marine biodiversity goals and objectives of the MPA network, and how these fit in the formal protected areas system;
- (c) ecosystem types and natural features that are likely to be represented in the network, including coastal areas, near-shore and deepwater marine areas, the seabed and water column, and islands and archipelagos;
- (d) large MPAs, envisioned or existing, with multiple objectives that may require zoning, either through a management plan or by legally defined categories;
- (e) anticipated institutional arrangements, including the full range of governance approaches, that may exist or have potential, for managing sites in the MPA network;
- (f) any proposed sites that need urgent protection on an interim or temporary basis until they are legally established under existing or new legislation;
- (g) any proposed large, multi-purpose MPAs with special features justifying site-specific legislation;
- (h) customary or traditional rights, practices, privileges or uses that need to be addressed;
- (i) new categories of stakeholders—for example, industrial fishing fleets (domestic or foreign), ports authorities, maritime shipping, international navigation interests, marine tourism companies and tour operators (domestic or foreign), bioprospecting companies, underwater cultural heritage interests—that should be recognized in legal provisions with respect to participation and involvement in management.

Configuration of legal framework. As with general protected areas legislation, the legal framework for MPAs may take one of three approaches: (1) umbrella provisions for the MPA network or system overall, with authority to designate specific sites within that framework; (2) specific legislation for each area or group of areas; or (3) some combination of these two approaches. Whatever approach is selected, it should be linked to the overall protected areas legal framework, and be guided by the nature of the sites to be protected, the state of existing sites, and the strategy and objectives for declaring future sites for an MPA network. Umbrella provisions for MPAs could be incorporated within principal protected areas legislation, and still be distinctly identified, by devoting separate chapters or parts of the legislation to legal elements specific to MPAs. In such cases, schedules to principal legislation listing protected areas declared under the law should include MPAs and may also reference MPAs with separate legislation. 137

Typically, MPA legislation has taken the umbrella approach. Some well-known sites, however, have been created with their own legislation because of the large and distinctive ecosystem being protected. 138

This is the case, for example, with the Great Barrier Reef Marine Park in Australia, created in 1975 through site-specific legislation with provisions for a separate institutional structure, the Great Barrier Reef Marine Park Authority, as well as management planning and zoning, monitoring, and stakeholder participatory mechanisms specifically for that site. Another large MPA, the Florida Keys National Marine Sanctuary in the US, was designated in 1990 by an Act of the US Congress, the Florida Keys National Marine Sanctuary and Protection Act 1990 (Pub. L. No. 101-605, 104 Stat. 3089), with management planning and zoning, institutional arrangements, and stakeholder participation mechanisms tailored to the specific needs of that area.

4.2 Preliminaries

4.2.1 Marine and oceans policy

139 Ideally, there will be an explicit national or sub-national marine and oceans policy declared by the government or otherwise provided, for example, in the constitution. As with protected areas policy overall, marine and oceans policy may also be reflected in policy reports of a general nature (such as sustainable development strategies) or more targeted nature (such as national biodiversity strategies). National marine and oceans policy may also be grounded in or draw from obligations under international or regional conventions to which the country is a Party, or from international policy instruments, such as Agenda 21 or the World Summit on Sustainable Development (WSSD) Plan of Implementation.

140 Subject to legal practice, it is worthwhile for MPA legislation to include a provision early in the text referencing existing marine and oceans policy the legislation aims to implement. Such a reference helps policy makers, officials and stakeholders appreciate the policy basis for the law. The reference may be in the law's long title or preamble, or in a distinct provision. Alternatively, introductory or background documents containing this information could accompany the draft legislation through the technical and policy review process. As with protected areas legislation in general, where a marine and oceans policy does not exist, a policy provision may be added to the legislation to provide a clear foundation for the law once enacted.

141 For policy concepts or policy language that could be incorporated in MPA provisions, the legal drafter may want to review the goal for work under the CBD relating to marine and coastal protected areas that is set out in CBD Programme of Work on Marine and Coastal Biodiversity:

The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to a global network of marine and coastal protected areas, building upon national and regional systems, including a range of levels of protection, where human activities are managed, particularly through national legislation, regional programmes and policies, traditional and cultural practices and international agreements to maintain the structure and functioning of the full range of marine and coastal ecosystems, in order to provide benefits to both present and future generations (CBD COP 2004 VII/5, para. 18).

142 Policies on marine and coastal protected areas could emphasize general goals such as the following:

- (a) establish and maintain a network of marine and coastal protected areas that is comprehensive and representative for the purpose of conserving the full range of marine habitats and ecosystems, giving priority protection to those which are rare or unique;
- (b) advance through national action the worldwide network of marine and coastal protected areas;
- (c) promote regional cooperation on shared marine resources and important marine ecosystems (for example, coral reefs, deep sea vents);

- (d) provide for the continued social and economic well-being of people affected by the creation of marine and coastal protected areas;
- (e) promote the use of a wide range of governance approaches for the management of MPAs.

4.2.2 Definitions

Some definitions in addition to those provided in Part I are important to review specifically in the context of legal provisions for MPAs. 143

Marine protected area. Guidance is available from different sources to aid the legal drafter working with protected area authorities in drafting a definition for MPAs appropriate to the needs of the country or jurisdiction involved. Three major sources are noted below (IUCN, CBD, and the EU through Natura 2000), and all provide valuable and complementary insights. These protected areas legislation guidelines use the IUCN definition. 144

IUCN definition. As discussed in Part I, IUCN-WCPA issued guidelines for applying protected area management categories in 2008 (Dudley, 2008) which followed from the guidelines issued in 1994 (IUCN, 1994). The 2008 IUCN-WCPA guidelines include a generic definition applicable to all protected areas, whether terrestrial or marine. The 2008 definition is now the operational definition used by IUCN-WCPA, and is promoted and used by IUCN in its work on protected areas, including MPAs. It reads as follows: 145

A protected area is a clearly defined geographical space recognized, dedicated and managed, through legal and other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values.

In addition, in 1988 IUCN members adopted a definition specifically tailored to MPAs (IUCN GA 1988 17.38) which has been used in IUCN MPA management guidelines and in many publications, as follows: 146

Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment (Kelleher, 1999).

The 2008 IUCN-WCPA definition of protected areas is useful for MPAs for a number of reasons. Most marine professionals in IUCN-WCPA support its application in order to bring MPAs more in line with other protected areas. A common definition across all protected area types is expected to avoid potential confusion where protected area systems include MPAs or where a particular protected area includes both terrestrial and marine components. In addition, it is generally felt that the 2008 IUCN-WCPA definition could provide a clearer demarcation between conservation-focused marine sites which would qualify as protected areas and those where the primary purpose is extractive use, in other words, fisheries management areas, which would not qualify. 147

According to the 2008 IUCN-WCPA guidelines, the protected areas definition as applied to MPAs does not preclude the inclusion of relevant fishery protection zones but their primary objectives need to be consistent with the IUCN definition to be recognized as an MPA by IUCN-WCPA (Dudley 2008, p. 56). In addition, the definition may be applied to MPAs across the range of protected area categories, from strict protection to multiple use (equivalent to IUCN categories I–VI). This allows for MPAs or zones within MPAs to have sustainable use objectives, as long as consistent with the primary conservation objectives, and still be recognized as part of the formal protected areas system. Importantly, this approach recognizes that not all MPAs must be no-take areas. IUCN intends to produce more detailed guidance on use of the protected area management categories in marine systems. 148

- 149 In practice, countries may use the IUCN definitions in their legal frameworks or develop variations based on other guidelines that best meet their needs. Countries may also use their own terminology for MPAs, for example, marine parks, marine reserves, marine sanctuaries or marine conservation areas. As with terrestrial sites, use of the IUCN numerical classification system (categories I–VI) provides a common framework for international reporting and the compilation of data by management category regardless of the local terminology used.
- 150 **CBD definition.** The CBD has also developed a definition for marine and coastal protected areas which was adopted in 2004 as part of the Programme of Work on Marine and Coastal Biological Diversity. The definition, which is intended to apply to all IUCN protected area management categories, is as follows:
- (a) ‘Marine and coastal protected area’ means any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection [than its] surroundings.
 - (b) Areas within the marine environment include permanent shallow marine waters; sea bays; straits; lagoons; estuaries; subtidal aquatic beds (kelp beds, seagrass beds; tropical marine meadows); coral reefs; intertidal muds; sand or salt flats and marshes; deep-water coral reefs; deep-water vents; and open ocean habitats (CBD COP 2004 VII/5, fn. 1).
- 151 **European Union.** The EU has developed MPA guidelines to be used by its 27 Member States in relation to the Natura 2000 network (discussed in Part I, section 5.3). These apply to the Habitats Directive for the purposes of designating SACs. The guidelines define ‘marine habitat types’ to include: sandbanks slightly covered by sea water all the time, posidonia beds, estuaries, mudflats and sandflats not covered by seawater at low tide, coastal lagoons, large shallow inlets and bays, reefs, submarine structures made by leading gases, submerged or partially submerged sea caves (Natura 2000 Guidelines, Chapter 3, para. 3.1).
- 152 **Network of MPAs.** At the international level, the concept of a global network of marine and coastal protected areas has emerged as an important concept for meeting marine biodiversity conservation goals. The network approach has gained significant attention at the country level because it is recognized that marine conservation necessarily starts with national and regional networks using the ecosystem approach. IUCN-WCPA defines a marine and coastal protected areas network as follows:
- A collection of individual marine protected areas operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfil ecological aims more effectively and comprehensively than individual sites could alone. The network will also display social and economic benefits, though the latter may only become fully developed over long time frames as ecosystems recover. [...] Representative networks of MPAs [are] those that contain examples of all habitats and ecological communities of a given area (IUCN-WCPA, 2007a, p. 3).
- 153 Parties to the CBD have elaborated on the concept of a global marine and coastal protected areas network in the Programme of Work on Marine and Coastal Biodiversity (see Box III(2)-6, above) and how it would function:
- A global network provides for the connections between Parties, with the collaboration of others, for the exchange of ideas and experiences, scientific and technical cooperation, capacity building and cooperative action that mutually support national and regional systems of protected areas which collectively contribute to the achievement of the programme of work. This network has no authority or mandate over national or regional systems (CBD COP 2004 VII/5, fn. 2).
- 154 **Coastal (near-shore) versus deepwater (offshore) marine areas.** The development of protected areas in coastal zones may involve different considerations from the development of protected areas in deepwater marine environments. These include the composition of stakeholder groups involved (for example, local communities and indigenous peoples may have interests closer to the coastal zone while domestic and foreign industrial fishing fleets have interests in deep waters of the EEZ). The level of scientific understanding, available data and ecological knowledge are likely to be different, and

deepwater environments may be less well known or studied in comparison with near-shore coastal wetlands, estuaries, mangroves, seagrass beds or coral reefs. Management capacity and the necessary equipment will also differ, along with compliance and enforcement approaches.

Coastal or near-coastal environments typically face different threats as well (for example, land-based sources of pollution, nutrient run-off, sedimentation, coastal development, near-shore overfishing or unsustainable tourism). Deepwater environments may be more exposed to unregulated or illegal industrial fishing, or to oil prospecting, mining, bioprospecting, and the dumping of ship waste. Coastal environments also experience different biophysical impacts (for example, higher temperatures and salinity fluctuations, more nutrients for species growth and reproduction). 155

In legal provisions for MPAs, it is advisable to define the marine zones for the purposes of establishing MPAs. It may be useful to distinguish between coastal and deepwater zones where these zones present different jurisdictional considerations and design, management and enforcement needs. The approach of some countries, for example, New Zealand, is to use the limit of the territorial sea as the boundary between coastal and deepwater marine areas (see New Zealand Ministry of Fisheries and Department of Conservation, 2008). Using that approach, one could consider the following characterization as a way to differentiate coastal and deepwater zones for legislative purposes: 156

- **Coastal (near-shore) marine area** refers to estuaries, tidal reaches, mouths of coastal rivers, coastal lagoons, the open coast, and the seabed and water column of the sea, out to the limit of the territorial sea (or to a specified depth seaward, for example, 200 m, whichever is greater).
- **Deepwater (offshore) marine area** refers to the seabed and water column habitats and ecosystems beyond the limit of the territorial sea.

Marine area under national jurisdiction. In countries that have declared an EEZ in accordance with international law, it is important for MPA legislation to define the marine area within which MPAs may be created as extending to the limit of the declared EEZ. Similarly, where a country's continental shelf extends beyond the EEZ and has been so recognized under international law, MPA legal provisions may further take this extended limit for the purposes of establishing MPAs on the seabed or subsoil (see section 3.1.1, paragraphs 61–65, above). 157

4.3 Objectives of MPA networks and sites

In 2002, the WSSD adopted a Plan of Implementation that paid special attention to marine life and ecosystems because of growing concerns about degradation across the planet. It called for the conservation and management of the oceans through action at all levels, and in particular for maintenance of “the productivity and biodiversity of important and vulnerable marine and coastal areas, including areas within and beyond national jurisdiction” (UN, 2002, para. 32(a)). The Plan of Implementation set out several specific objectives as well as a target for action: 158

Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012, and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors (UN, 2002, para. 32(c)).

The Vth IUCN World Parks Congress (WPC) in 2003 followed with a further target, recommending that marine and coastal protected area networks be extensive and include strictly protected areas amounting to at least 20–30 per cent of each coastal and marine habitat (IUCN-WPC 2003 V.22). Soon thereafter, Parties to the CBD adopted the updated and elaborated Programme of Work on Marine 159

and Coastal Biological Diversity. This Programme of Work continued the call for “integrated networks of marine and coastal protected areas” and adopted the 2012 target for building marine and coastal protected area networks comprised of representative areas where extractive uses might be allowed as long as managed for sustainable use, and other representative areas where extractive uses would be excluded “to enable the integrity, structure and functioning of ecosystems to be maintained or recovered” (CBD COP 2004 VII/5, operational objective 3.1).

160 Most significantly, the CBD Programme of Work stresses the need for effective legal and institutional measures to support such actions. It calls upon all Parties to:

achieve effective management of marine and coastal protected areas through good governance, clear legal and customary frameworks to prevent damaging activities, effective compliance and enforcement, ability to control external activities that affect the marine and coastal protected areas, strategic planning, capacity building and sustainable financing (CBD COP 2004 VII/5, operational objective 3.3).

161 **Objectives for legislation.** As with terrestrial protected areas, legal provisions on the objectives of the marine and coastal protected areas network and individual sites help guide decision making on establishment, management and monitoring, and the control of activities within the network or in specific sites. Objectives become the baseline by which to assess the performance and effectiveness of decisions taken and approaches used. International recommendations, including those from IUCN Congresses and CBD Conferences of the Parties, provide useful language for the legal drafter when formulating provisions on objectives for a marine and coastal protected areas network. Several examples are offered below to illustrate how concepts can be emphasized, mixed or combined, depending on what is most appropriate for the situation. General provisions include the following:

- (a) Protect substantial examples of representative and ecologically important marine and coastal ecosystems to ensure their long-term viability and to maintain their biological diversity;
- (b) Conserve marine biodiversity, including marine genetic diversity, and sites high in marine genetic diversity in order to prevent genetic impoverishment of marine species;
- (c) Establish and support a network of marine and coastal protected areas using the ecosystem approach and principles of integrated marine and coastal resource management, including connectivity conservation measures, to sustain the conservation objectives of the network and individual sites;
- (d) Protect key ecological functions and processes, such as upwellings, which are important for bringing deeper, colder, nutrient-rich waters to the surface, influencing food web dynamics and the productivity of marine areas;
- (e) Protect and restore depleted, threatened, rare or endangered marine species and populations and, in particular, preserve habitats considered critical for the survival of such species;
- (f) Provide buffers to mitigate the effects of accidental impacts or unfavourable or changed environmental conditions, and to prevent outside activities from detrimentally affecting marine and coastal protected areas;
- (g) Serve as carbon sinks by absorbing the increasing amount of carbon dioxide being emitted into the atmosphere;
- (h) Serve as sites to provide a baseline for climate change impacts and build resilience and adaptation to help species and ecosystems overcome negative impacts;
- (i) Implement obligations under international agreements and programmes;
- (j) Serve as reference and monitoring sites for understanding the environmental effects of human activities, including the direct and indirect effects of development and adjacent land and marine use practices;

- (k) Provide educational and recreational opportunities for the public to appreciate and experience marine natural and cultural heritage;
- (l) Provide for scientific research, training and education;
- (m) Preserve, protect and manage historic, cultural and sacred sites and the natural aesthetic values of marine and coastal areas for present and future generations;
- (n) Recognize and help protect and maintain traditional conservation practices and institutions of indigenous peoples and local communities where beneficial to the overall conservation objectives of the network;
- (o) Ensure the continuation of customary and traditional activities by indigenous or other traditional, aboriginal or tribal groups;
- (p) Accommodate within appropriate management regimes, including through zoning, a broad spectrum of human activities compatible with the primary conservation goals of marine and coastal protected areas;
- (q) Recognize and use the full range of governance approaches, as feasible and available, for managing specific sites or zones within sites, in accordance with the purposes for which the site or zone was designated.

Site-specific objectives are also important to clearly identify for individual sites. Best practice management principles suggest that marine and coastal protected areas should be designed to simultaneously accomplish as many conservation objectives as possible (Salm et al., 2000, p. 15). Multiple objectives may be applied to a single site or to interconnected sites. Many of the network objectives noted above could also apply to specific sites. Further examples of site-specific objectives are as follows:

162

- (a) Protect or restore a specific scientifically important ecosystem or ecosystems, including coral reefs, seagrass beds, deep seabed vents or other biodiversity hot spots; spawning, nesting or feeding grounds for important marine species; or critical habitats for rare, threatened or endangered marine species and the ecosystems on which they depend;
- (b) Protect specific estuaries, wetlands and lagoons as feeding grounds for wildlife, habitat for endangered and threatened species, recreation, and maintenance of natural processes;
- (c) Provide educational opportunities to help the public and users understand the importance of marine and coastal protected areas for biodiversity conservation and economic benefits such as ensuring sustainable tourism;
- (d) Provide conservation connectivity between specified core areas to ensure the integrity of those protected sites and their species and ecosystems;
- (e) Protect sites of international importance, for example, Ramsar wetlands, world heritage marine sites, as well as PSSAs and special areas under the IMO.

4.4 Strategic planning for the MPA network

The idea of building networks of marine and coastal protected areas gained scientific attention in the 1990s, as a conceptual approach to managing marine species and ecosystems that could accommodate their special dynamic and three-dimensional features. This concept provided a framework within which MPA professionals could develop a subset of principles and goals specifically for marine and coastal protected areas as part of the larger national or regional system of protected areas. The concept of marine and coastal protected area networks continued to be developed into the 2000s and was firmly grounded in international policy by 2002 with the WSSD call for representative networks of MPAs worldwide by 2012.

163

- 164 Part I discusses the importance of developing an overall system plan for the selection and management of all protected areas, and Part III, Chapter 1, recognizes the system plan as a required element of general protected areas legislation. In the marine environment, where scientific development and site designation are much less advanced, a strategy for building the marine and coastal protected areas network as part of the overall protected areas system is equally important. This is a new long-range planning tool being increasingly recognized for MPA planning, establishment and management.
- 165 A strategic plan is important for countries that are in the preliminary stages of designating marine and coastal protected areas as well as for countries which may have a well-established network. Strategic planning helps ensure that the most important representative sites are identified, that resources are allocated to the most high-value sites over the near and long term, and that institutional capacity is developed in a systematic way as part of MPA network building and maintenance.
- 166 **Provision on strategic planning.** It is important for the legal drafter working with the relevant protected area authorities to consider including a legal provision calling for development and regular updating of a strategic plan for the marine and coastal protected areas network.
- 167 The provision could indicate that the purpose of the strategic plan is to advance the overall objectives of effectively managing existing marine and coastal areas and establishing new areas in a systematic and incremental way to be part of the network. The strategic plan should incorporate, as relevant, existing areas, areas of high priority for designation in the near term, other areas of high priority needing additional time for study and consultation, and areas for possible consideration in the future as new data and scientific analysis become available (these later aspects may be particularly relevant for deepwater marine areas). A strategic plan should also incorporate governance considerations and recognize, where relevant, the variety of governance approaches or types that may be available to maximize the conservation objectives of the network.
- 168 It should be stressed, however, that strategic plans should not be used to exclude opportunities for MPA establishment (Kelleher, 1999, p. 40). While it is important to include in the legislation a provision for strategic planning, the provision should make it clear that the exclusion of a new or expanded high-value site from a strategic plan should not preclude it from being established should the opportunity arise.

4.5 Institutional arrangements

- 169 Building on the generic elements for protected areas legislation discussed in Part III, Chapter 1, two institutional issues related to marine and coastal protected areas are worth highlighting: (1) clear designation of powers and responsibilities to marine and coastal protected area authorities, particularly where multiple jurisdictions may be involved; and (2) coordination and collaboration mechanisms to accommodate the wide range of institutional interests potentially involved and account for special management challenges, including transboundary issues. These considerations are briefly discussed here in the context of MPAs.
- 170 **Lead MPA authority.** A high policy-level body is normally designated with overall responsibility for the network of marine and coastal protected areas, as well as for specific sites with separate legislation, just as with terrestrial areas. This body is typically the minister in charge of the overall protected areas system of which the marine and coastal protected areas network and its sites are a part.
- 171 MPA legal provisions should identify the specialized government agency or other lead technical authority responsible for implementing the legislation at the national level and managing the MPA network. In

many countries, this will be the national agency designated with overall responsibility for the protected areas system. In many other countries there will already be a coastal or marine authority which could assume responsibility for marine and coastal protected areas, thereby avoiding the creation of new marine authority or the need to add marine responsibilities to an existing protected areas authority with primarily responsibility for terrestrial areas. Where the terrestrial and marine protected areas agencies are different, creation or designation of a coordinating body, such as a commission or oversight board, should be considered with responsibility for integrating policy and programme implementation for the protected areas system, including marine and coastal protected areas, and sites that may have separate legislation.

In federal states or decentralized forms of government, there may be parallel entities with responsibilities at the provincial or state level, or special negotiated arrangements for collaborative management between central and provincial levels of government. This latter approach was used, for example, with the Great Australian Bight Marine Park, which was collaboratively established in the late 1990s by a legal arrangement between the federal and state governments (see Box III(2)-4). 172

At the management level, as with terrestrial sites, multiple MPA sites may be governed by a single protected areas authority, particularly where there are few sites located in relatively close proximity. Alternatively, some or all individual sites in the network may have specially designated management authorities that share areas or are in charge of a single site. In countries where the marine jurisdiction extends to the EEZ, it may be necessary to designate different management authorities as a matter of practicality, particularly where sites are diverse and widely dispersed. Where transboundary issues are involved, collaborative arrangements may be needed among the various management entities. In such cases, site-management authorities would normally call upon the assistance and guidance of the national MPA entity to help define and undertake such collaborations. 173

In some cases, a decentralized or local approach to MPA management may be most responsive to on-site needs. For example, traditional fishing grounds being managed for conservation and sustainable use by indigenous peoples or local communities may be valuable biodiversity sites to recognize as part of the MPA network. In such cases, the local entity involved has first-hand knowledge about the natural resources and management needs of the site and a direct economic interest in managing the site sustainably. Where the site is proposed to become part of the formal MPA network, governance arrangements should be explored where the local entity retains a lead management role (either as sole manager or co-manager). 174

A very large, multiple-zoned marine area, whether set up by umbrella legislation or a separate act, may need a separate authority specific to that protected area (as is the case with the Great Barrier Reef Marine Park Authority). 175

Mechanisms for coordination and collaboration. The multitude of diverse and competing sectors and jurisdictional levels involved in marine and coastal affairs makes it imperative that MPA authorities are empowered and required to coordinate and collaborate with other sectors and interests. Because of the independent, long-standing powers of most maritime shipping and marine resource agencies, experience has shown that this is “both the hardest and most important part” of the MPA manager’s job (Kelleher, 1999, p. 21). 176

Mechanisms for coordination and collaboration are aided when all relevant legislation is harmonized at the time of enactment of new protected areas legislation. As part of the pre-drafting and drafting process, the legal drafter should identify other laws and subsidiary instruments that may be in conflict with the new protected areas legal framework, including any marine and coastal elements, and indicate 177

amendments or repeals that may be needed (see Part III, Chapter 1, section 13). Even when legislation in other sectors is formally harmonized with MPA legislation, it is still important to emphasize coordination across sectors and levels of government because of the special features of MPAs and their relatively recent emergence in many countries. This emphasis in a legislative provision could indicate key government sectors and levels that should be involved in regular consultations to minimize operational conflicts and maximize opportunities to support each other in management, research, monitoring, compliance and enforcement.

- 178 These key sectors may include fisheries, tourism, navigation, ports, coast guards, customs and commerce. A mandate to coordinate and collaborate could be framed as a general duty of protected area authorities using existing mechanisms. Alternatively, a new mechanism (such as a technical-level committee or commission) could be set up for this specific purpose. In either case, any new governance approaches being recognized for individual sites should be represented in these coordinating mechanisms. These governance arrangements may give legal authority for management or co-management to communities, indigenous peoples, corporations (including NGOs and private-sector for-profit companies), and private parties.
- 179 In many coastal states, fisheries is a dominant or significant sector impacting MPAs or with potential to support MPAs. In such situations, it is essential that MPA authorities give priority to building collaborations and partnerships with the fisheries sector and associated stakeholders. Where small-scale traditional fisheries dominate, fishing is often the main support for local livelihoods and the communities are sustainably managing marine and coastal resources. In such cases, community-based collaborations are important to promote traditional practices, build on local knowledge and recognize marine and coastal protected area governance arrangements where appropriate.
- 180 In areas where industrial fishing dominates, stakeholders may include both domestic and foreign operators. Again, it will be important for MPA authorities and fisheries authorities to coordinate on appropriate management controls to ensure that the industrial fishing activities do not negatively impact MPAs. Negative impacts from industrial fishing could come through overfishing, use of fishing techniques that may destroy other species or critical marine habitats, or pollution or other activities that harm species and ecosystems.
- 181 **Recognizing all governance approaches.** As discussed in Part II, all governance approaches may apply to any type of protected area, including MPAs. MPA legal provisions should recognize possibilities for the management or co-management of marine and coastal protected areas by government entities, communities, indigenous peoples, corporations, NGOs and even private parties in appropriate cases.
- 182 Coastal zones, in particular, may include indigenous peoples and local communities with traditional or statutory tenure rights to coastal or marine resources. Coastal areas suitable for designation as marine and coastal protected areas may also include private property beyond the shoreline (such as wetlands or estuaries) that is voluntarily managed for conservation by the landowner. In some countries, NGOs have assumed management responsibilities for certain MPAs.
- 183 IUCN and other international organizations promote the inclusion of community-based marine and coastal protected areas as part of the MPA network, where appropriate (CBD COP 2004 VII/5; IUCN-WCPA, 2007a; World Bank, 2006). As with terrestrial protected areas, indigenous peoples and local communities may possess important traditional knowledge and skills for the on-site planning and management of marine resources and coastal habitats. Involving such entities in the governance of MPAs may also help improve local compliance and reduce the costs of enforcement by using local officers from those communities for surveillance and to help with enforcement. Such approaches have been used, for example, in the South Pacific in areas known as LMMAs (see Box III(2)-5, above).

Where community-based management or co-management is not appropriate but traditional fishing practices exist, legal provisions should promote the recognition of traditional fishing grounds, as long as compatible with the proposed protected area objectives of the site. If the fishing grounds must be reduced, other incentives may be provided to compensate. Where legally recognized traditional fishing rights must be curtailed with the creation of an MPA, there should be appropriate compensation for loss of rights. 184

Co-management (or shared management) is a new governance type for protected areas, with non-governmental entities sharing in important decisions (see Part II, section 3.3). Co-management of MPAs is a governance approach with significant potential for expanded use in countries setting up marine and coastal protected area networks. A wide range of actors may be involved, from private-sector fishing operators and tour operators, to NGOs, communities and individuals. Co-management between a government and such entities, for example, may involve formal assignment by the government (through licence, lease or other legal means) of long-term fishing or other resource use rights in appropriately designated MPA zones in exchange for commitments to fishing quotas, the use of certain practices to ensure sustainability, specific monitoring and data collection duties, and regular reporting requirements. 185

Advisory committees. As with protected areas legislation in general, MPA legislation should consider establishing advisory committees for the marine and coastal protected areas network or for specific sites or specific issues. One role of an advisory committee is to bring together diverse marine expertise, including scientists, practitioners, academics and user groups, to share their knowledge about the condition of existing sites, present and anticipated threats, and potential new sites. 186

Some committees could be composed of local stakeholders or other interested local actors and have an active role in MPA monitoring on the ground. This could include helping to collect specific data for the site, where capacities and resources exist. Other committees might be composed of local citizens and the public at large for the purpose of education and awareness building about the potential benefits of marine and coastal protected areas to local communities, and how local communities may participate more actively. Still others could have the role of building local consensus on specific issues associated with management options and techniques for consideration and approval by the protected area authorities. 187

4.6 Establishment

A few special issues related to legislative provisions on the establishment of marine and coastal protected areas are important to highlight here, building on the generic elements discussed in Part III, Chapter 1. These are related to issues of scale, key site selection criteria, giving priority to no-take zones and strictly protected areas, stakeholder participation, and boundaries. 188

Issues of scale. Protected area authorities will need to choose whether the MPA network will be comprised of a large number of small protected areas or a few large multiple-use protected areas. The approach chosen has special significance in marine environments, where the dynamic and multi-dimensional nature of the environment presents unique challenges for management, controlling external threats and adapting to unanticipated change. 189

In keeping with best practice management principles, legislation should provide that individual MPA units are of sufficient size to minimize adverse impacts from activities outside the protected area (avoiding edge effects). Where feasible, legal provisions should promote the establishment of a few large sites rather than the establishment of several smaller sites. IUCN-WCPA recommends this approach. In addition, the CBD Programme of Work on Marine and Coastal Biodiversity (CBD COP 190

2004 VII/5) reiterates the importance of this approach, especially for strictly protected representative areas where extraction of all kinds is excluded. The CBD Programme of Work specifically addresses the issue of scale, stating that marine sites “should contain sufficient area and replicates to ensure that they can fulfil their objectives and be ecologically viable over time” (CBD COP 2004 VII/5, Appendix 3, para. 11). The Programme of Work goes on to explain that experience with terrestrial protected areas and MPAs, as well as the literature, indicate that the requirement of representativeness cannot be met by establishing a few small marine and coastal protected areas.

191 Key criteria for selection and design. It is important that MPA legal provisions incorporate guidance or criteria for designing marine and coastal protected area networks and sites. The considerations reviewed in Part III, Chapter 1, with respect to the establishment of protected areas in general, apply to marine and coastal protected areas as well. They include identifying the boundaries and primary conservation objectives of a site or zones within a site, and the larger-scale marine spatial planning and management considerations necessary to take into account environmental connectivity variability. They also involve determining the appropriate protected area management category or categories based on the conservation objectives, and deciding on a governance type. Consideration should also be given to the social and economic interests that may be affected by establishing a particular site, and how these interests support or threaten its conservation objectives and sustainability as a protected area. As part of that evaluation, it is important to determine if the proposed MPA should undergo an environmental and social impact assessment before establishment, as discussed generally in Part III, Chapter 1, section 11.

192 MPA provisions should also require science-based management using the best available means. In particular, science and technology are increasingly being recognized as essential tools for designing and managing marine and coastal protected areas effectively. Such tools as remote sensing, global positioning systems (GPS) and satellite tracking of species are particularly important for defining and delineating proper boundaries to ensure representative and ecologically viable areas; understanding species and ecosystem behaviour and threats; informing compliance and enforcement mechanisms; tracking navigation, shipping, industrial fishing and other commercial activity; and aiding with data collection and scientific research.

193 In addition, IUCN and the CBD, the latter through its Programme of Work on Marine and Coastal Biological Diversity, have continued to elaborate guidance and criteria for designing marine and coastal protected area networks and sites (CBD COP 2004 VII/5; IUCN-WCPA, 2007a). These criteria are important to consider reflecting in MPA provisions guiding the selection and design of particular sites:

- **Representativeness.** MPA networks should represent the range of marine and coastal biological diversity (from genes to ecosystems) and the associated physical environment within the given area, as well as critical habitats for threatened and endangered species.
- **Replication.** All habitats in each region should be replicated within the network and distributed spatially throughout the network.
- **Viability.** MPA networks should incorporate self-sustaining, geographically dispersed component sites of sufficient extent to ensure population persistence through natural cycles of variation. These sites should be independent, as far as possible, of activities in surrounding areas.
- **Precautionary design.** Network designers should base their decisions on the best information currently available, rather than delaying the process to await more and better information. Where information is limited, designers should adopt a precautionary approach.
- **Permanence.** Network design must provide long-term protection to effectively conserve diversity and replenish resources.

- **Maximum connectivity.** MPA network design should seek to maximize and enhance the linkages between individual MPAs, groups of MPAs within a given ecoregion, or networks in the same or in different ecoregions.
- **Resilience.** MPA networks must be designed to maintain the natural state of ecosystems and to absorb shocks, particularly in the face of large-scale and long-term changes (such as climate change).
- **Minimizing adverse impacts on existing users.** When choosing potential sites, it is essential to consider the social and economic interests of existing users and, to the extent possible, to minimize adverse impacts. This information should include current and potential uses and the contribution that protection could make to economic or cultural values.
- **Cultural values.** Where there are important sites of cultural, historic or sacred value associated with ecologically important natural marine or coastal areas, this combined value should be given primary consideration.

Interim protection and precautionary approach. It is important for MPA legislation to authorize the designation of sites for interim protection in cases where additional data collection and stakeholder consultations are required. Such information is key for determining the appropriate protected area management category (or categories, where zones are legally established), the delineation of zones with different objectives and the content of the draft management plan. 194

Interim protection may also be needed to create immediate protection for a site until the process of formal designation can be concluded. Interim protection orders can provide controls over activities that threaten to damage the area and cause serious or irreversible harm to its conservation values (see Part III, Chapter 1, section 6.6). 195

Many marine areas, especially deepwater areas, are not as well studied as terrestrial areas. In addition, global change factors such as climate change present new and serious long-term threats to marine environments that are not well understood. Legal tools for interim protection allow decision making about boundaries and protection measures for new MPA sites to take a precautionary approach, allowing time for thorough assessment and consultations in advance of designation. This period of time enhances the ability of MPA managers to advise on design and protection aspects that will allow flexibility for adaptive management of the site or zones to build resilience to face future threats. Applying the precautionary approach to the establishment and management of MPAs minimizes decisions with serious and irreversible negative consequences over the long term that could undermine the conservation objectives of the site (see Part I, section 3.4). 196

The need for highly protected zones. MPA legislation should recognize that a network of highly protected areas (or highly protected zones in a large MPA) is normally a necessary component of a country's marine and coastal protected areas network. It is important to protect the full range of plants and animals in the marine environment, not just specific fish stocks which seasonal or rotational closures may target. The CBD Programme of Work on Marine and Coastal Biodiversity recognizes that a representative marine and coastal protected areas network should contain a balanced mix of highly protected MPAs where extractive activities are prohibited permanently and others where sustainable use may be allowed on a controlled basis as long as consistent with the primary conservation objectives of the area (CBD COP 2004 VII/5, programme element 3 and Appendix 3). 197

Specific benefits of or objectives for designating highly protected marine areas that are worth incorporating in legal instruments (principle or subsidiary) include the following: 198

- (a) protecting biodiversity, including preventing loss of vulnerable species, restoring population size and age structure, restoring community composition, protecting genetic structure of populations;
- (b) protecting ecological processes from the effects of exploitation by maintaining the abundance of keystone species, preventing second-order and cascading ecosystem effects, preventing threshold effects, maintaining food web and trophic structure, ensuring system resilience to stress;
- (c) maintaining high-quality feeding areas;
- (d) promoting a holistic approach to ecosystem management;
- (e) eliminating fishing gear impacts and by-catch within the area;
- (f) providing undisturbed spawning conditions, habitats and settling sites;
- (g) providing essential fisheries management data including estimates of natural mortality;
- (h) including sites where the public can see and understand the effects humans can have, and the benefits of management; and
- (i) providing long-term monitoring, benchmark control areas and places where research projects can be conducted unaffected by human activities (Day, 2006; SCBD, 2004b, pp. 11–12).

199 **Stakeholder participation.** The full and free participation of all stakeholders should be built into decision-making processes for the establishment and management of marine and coastal protected areas. Legal provisions for MPA establishment should include additional processes and mechanisms if needed for that purpose.

200 The marine environment has special stakeholders that protected area authorities may not be accustomed to consulting. These range from local communities dependent on fisheries or tourism for their livelihoods, to large domestic and foreign industrial fisheries, transit shipping, mining interests, scientific research vessels, and underwater treasure hunters. In some countries, the tourism industry may be strong, especially where marine waters contain coral reefs or underwater cultural sites. In countries without coral reefs and other tourist attractions, the dominant stakeholder may be fisheries.

201 There are many important advantages of including the full range of marine stakeholders in consultations and the participation process. Such stakeholders are likely to have specialized knowledge of or a working familiarity with the marine environments and resources they use, as well as the possible threats and perhaps even competing uses, whether legal or illegal. This applies to commercial fisheries and tourism companies as well as to local communities. Where community use of coastal and marine resources is predominant, for example, an important benefit of the participation process is to learn about their traditional knowledge and take it into account as part of the design and management planning for the proposed MPA. In return for gaining traditional, local or other user group insights and knowledge, governments have the opportunity to explain and demonstrate to stakeholders the potential benefits of establishing a protected area.

202 These many and varied stakeholder interests are important to identify and incorporate in decisions concerning the design and establishment of new or expanded MPAs. To reinforce this, MPA legal provisions could enumerate key stakeholder groups to be consulted and involved. In addition, advisory committees with representatives from such groups could be set up to provide a more structured mechanism to ensure their ongoing input and advice on MPA matters.

203 **Boundaries.** The legislation should specify that boundaries of marine and coastal protected areas must be simple and clearly defined in order to be easy to interpret for compliance purposes. To the extent feasible, descriptions of MPA boundaries and maps should be available in digitized form using satellite technology such as geographic information systems (GIS) and GPS. Verifying data for international

reporting of MPAs is hampered because digitally recorded boundaries are not available for many sites. Best practice guidelines on the establishment of MPAs include the requirement to generate digitally defined boundaries (see NOAA, 2006).

Boundary descriptions for the whole MPA (as well as internal zones) should be clear, accurate and correctly represented in order to be easily identified by managers, potential resource users, shipping operators and other interests for compliance and enforcement purposes. In contrast to terrestrial areas, marine areas have fewer visible geological features or political boundaries. The design of marine and coastal protected areas should aim for simple shapes and reduced fragmentation, using straight boundary lines and minimizing the perimeter-to-area ratio. Experience has shown that squares are easier to work with than irregular shapes, and that boundaries should follow major latitude and longitude coordinates where possible to make it easier to locate the sites on navigational charts. For near-shore zones, clear sight lines onshore or the use of other fixed objects are good alternatives to areas defined by geographic coordinates (see, for example, New Zealand Ministry of Fisheries and Department of Conservation, 2008, p. 20). 204

The legislation should also indicate the need to collaborate with other government sectors and stakeholders when defining boundaries. MPA boundaries must recognize other boundaries and jurisdictions that already exist in the area, including rights of innocent passage under international law for shipping. Collaboration with and the cooperation of the local communities involved may also be required to help identify, mark and monitor boundaries. Collaboration with neighbouring countries is also a good practice to encourage or require where MPA boundaries are near or adjoining national marine borders. 205

4.7 Management

A few aspects of MPA management are worth highlighting here to supplement the comprehensive discussion of generic elements for protected areas legislation in Part III, Chapter 1. 206

Management categories. The 2008 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) indicate that the IUCN categories (I–VI, from strict protection to sustainable resource use) apply to marine and coastal protected areas. As noted by the Vth IUCN-WPC in 2003: 207

MPAs covering the full range of IUCN Protected Area Management Categories are widely recognized by coastal nations as flexible and valuable tools for science-based, integrated area management (including highly protected marine reserves and areas managed for multiple uses) supporting ecosystem-based management, because they can help conserve critical habitat, foster the recovery of overexploited and endangered species, maintain marine communities, and promote sustainable use (IUCN-WPC 2003 V.22).

Zoning plans. The MPA legislative framework should support zoning as part of the management plan. Making use of zoning tools in marine and coastal protected areas can help to address issues of scale, special management needs, no-take requirements, buffer zones, economic and other uses (for example, navigation), and changing conditions internal to the site or as a result of external impacts. Normally, zoning is carried out entirely within the management plan, with boundaries and objectives specified. 208

Large-scale MPAs commonly have complex management requirements and mixed conservation objectives. Where the site is a large-scale MPA, legal provisions could require the MPA authorities to prepare a zoning plan that defines zones, as needed, to incorporate the range of conservation objectives involved and incorporate the zones into the management plan. 209

- 210 It is important to note that another approach within a large MPA is to give different zones legal designations according to their conservation objectives. This is particularly useful in marine environments where the needs of management may require a larger spatial planning framework and stronger enforcement tools within which to protect high-value core areas (the Great Barrier Reef Marine Park is a good example).
- 211 **Buffer zones.** Legal provisions for MPAs should emphasize the need for buffer zones to help accommodate the multi-dimensional aspects of marine environments. Buffer zone design must also take into account the special natural characteristics of marine and coastal systems related to the large-scale connectivity and variability of such fluid environments. The absence of buffer zones to control economic and other human activity in surrounding waters and at the land-sea interface puts even well-managed MPAs at risk. MPA networks comprised of several small MPAs require some protective measures in areas surrounding each site to serve as a buffer. Large multi-purpose areas may be able to provide buffers within the site through the use of zoning tools to ensure full protection of biodiversity-rich or environmentally sensitive core areas.
- 212 **Adaptive management.** An emphasis on adaptive management is particularly needed for marine environments, given their dynamic and multi-dimensional biophysical features and the special challenges of managing certain areas, such as deepwater sites. In addition, scientific understanding is still emerging about resources and species, ecosystem processes, threats, connectivity needs, and vulnerability to external events.
- 213 Adaptive management has taken on new meaning in the context of climate change. Climate change is already impacting marine and coastal protected area networks, and as impacts intensify, conservation objectives, boundaries and management needs may also change. To the extent possible, using best available scientific information, MPA system and site design must take into account issues of climate change and adaptation concerns. Much adaptation to climate change over the near and medium term may be possible within the framework of the existing management plan. In such cases, ongoing scientific monitoring and data collection provides input on climate change impacts as well as other changes that should be used for periodic updating of management and zoning plans. With time, the impacts of climate change may call for adaptation measures that go beyond the scope of the existing management plan and legally established boundaries, and the legislative process will need to be involved to adjust the legal designation of the site. Adaptation is facilitated when marine and coastal protected areas are designed with as much spatial coverage as possible to provide zones of sufficient size and flexibility to accommodate management changes within the scope of the management plan while still preserving the primary conservation objectives of the site.
- 214 **Integrated resource management within the wider environment.** Legislation for MPAs should promote or require, as feasible, an integrated approach to marine and coastal zone management. This approach places design and management decisions within the context of the wider marine and coastal environment. This integration takes into account information about activities outside the site that may have positive or negative environmental impacts on the site, in order to design the most effective management regime to sustain the conservation values of the site. Integration facilitates linkages between broader marine spatial planning and management, and the specific needs of the MPA. Integrated management requires collaboration with other marine sectors and users. It allows multiple-use objectives (navigation, fishing, tourism, sustainable use), vulnerabilities from external threats (for example, land-based pollution) and connectivity conservation needs to be reconciled.
- 215 A regional initiative in the Gulf of Mexico to build an MPA network that weaves together these many economic interests provides insights into the complex challenges involved in integrated marine resource management based on the ecosystem approach. Called 'Islands in the Stream', and involving the US,

Mexico and Belize, this initiative, currently in the planning phase, brings together federal and state governments and significant stakeholder interests (see Box III(2)-10).

The CBD Programme of Work on Marine and Coastal Biodiversity identifies the need for integrated marine and coastal area management as its first programme element (CBD COP 2004 VII/5). To advance this goal, states are encouraged to apply the ecosystem approach, promote integrated multidisciplinary and multi-sectoral coastal and ocean management at the national level, and develop supportive ocean policies and mechanisms (CBD COP 2004 VII/5, objective 1.1). The concept of marine spatial planning and management has been broadly endorsed in other international instruments as well, including the Ramsar Convention, and by international oceans organizations including, in particular, the Intergovernmental Oceanographic Commission of UNESCO (see Ehler and Douvere, 2009). 216

The Wadden Sea region is an example of an integrated marine and coastal area managed as a protected area by joint agreement of the Netherlands, Denmark and Germany. Various parts of the region are recognized as Ramsar sites. The Wadden Sea region is also recognized as a world heritage site under the World Heritage Convention and as a PSSA designated by the IMO (see Box IV-3 in Part IV). 217

4.8 Regulating activities

The primary goal of regulating activities within and in the vicinity of a designated MPA is to safeguard the conservation objectives of the site. As with terrestrial sites, some activities should always be strictly prohibited throughout the marine and coastal protected areas network, for example, damaging coral; taking or harming rare, threatened or endangered marine species; large-scale extractive activities like mining and industrial fisheries; and the dumping of ship waste, bilge water or toxic substances. Considerations related to compliance with regulations, and criminal and civil enforcement, as discussed in Part III, Chapter 1, section 10, relate equally to marine and coastal protected areas. 218

When identifying activities to regulate in an MPA system, the legal drafter should keep in mind that international treaties must be respected (for example, UNCLOS provisions allowing navigation in certain zones; see section 3.1, above). For activities that are to be addressed through MPA legal provisions, standard regulatory tools are available. Activities associated with general use of an MPA by the public may be authorized by general rules. These may be communicated by public notice, or in maps and handouts demarcating the zones available for different uses, for example, sites for recreational activities (such as snorkelling, diving, boating or swimming), or sacred or cultural marine sites. The legislation should provide that authorized activities may be prohibited if they are no longer consistent with the conservation objectives of the site. 219

Certain activities should be authorized only by a permit or other written document, and subject to such conditions as may be prescribed, including payment of fees and undertaking the activity in accordance with good practice. Concessions or permits may be appropriate, as long as consistent with the management plan, for such businesses as ecotourism operators, cruise ships, boat rental companies, beach restaurants, commercial film-makers and dive operators. In zones where some commercial fishing activities may be permitted, licences should be required specifying limitations, conditions and prohibitions. Scientific research should also require a permit; in some jurisdictions marine scientific research in an MPA is one of the primary activities, after fisheries, requiring oversight and management (see, for example, the Gully case study accompanying these guidelines: VanderZwaag and Macnab, 2010). Concessions or permits can be issued for a limited period or be subject to renewal. Some activities for which a concession or permit is being sought may require an EIA in advance of decision making on the application. 220

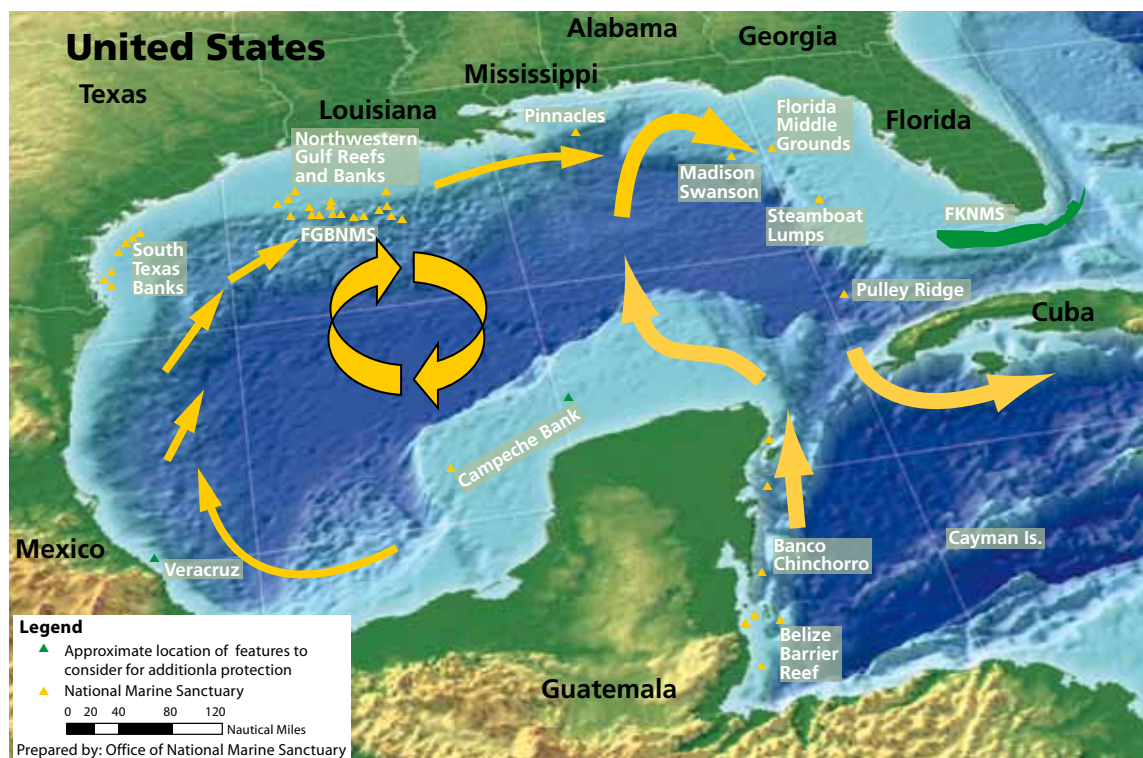
Box III(2)-10: Planning an MPA network—‘Islands in the Stream’ in the Gulf of Mexico

The Gulf of Mexico is one of the most intensively shared marine water bodies in the world. It supports a significant part of the US economy through its extensive oil and gas operations, recreational activities, commercial fisheries, ports, shipping, and scientific exploration. Mexico, which shares a sizeable portion of Gulf waters, has similar economic interests in the area. Much of the region’s economy depends on the Gulf’s diverse and rich marine life and unique habitats. As such, the Gulf’s economic sustainability is dependent on a healthy ecosystem. In recent decades, however, the ecosystem has come under increasing pressure from human and natural stresses including intensified pollution, overuse of natural resources, hurricanes and other natural events, and climate change.

In the 2000s, marine scientists began discussions on an ecosystem-based coordinated approach to marine resources management throughout the Gulf. As part of this approach, the development of an integrated network of MPAs linked by ocean currents was proposed. This followed years of research that identified major biological and geophysical linkages across the region. Individual reefs and banks form a nearly continuous physical corridor of unique marine habitats (‘islands’) containing a rich diversity of marine life (fish, corals and invertebrates). The currents (‘streams’) provide connectivity pathways between coastal and deep-sea ecosystems, which depend on one another for biological recruitment and replenishment. The currents move from the Caribbean, between the Yucatan Peninsula and Cuba, into the Gulf of Mexico on a clockwise path, and around the Florida Keys, eventually merging with the Gulf Stream (see Figure B).

Thus was born the ‘Islands in the Stream’ concept, envisioned as an MPA network of small discrete MPAs in US Gulf waters, most of which already have some form of protection, joined by similar efforts in Mexico and Belize. In 2008, an expert forum of more than 100 scientists and managers from around the Gulf of Mexico was convened with the support of several government agencies to examine the concept and its implementation. The forum concluded that there was sufficient science to support the creation of an international MPA network, and identified several ecologically vital and productive sites with which to start (Ritchie and Keller, 2008).

Figure B: A map of the Gulf of Mexico



Source: NOAA Office of National Marine Sanctuaries.

Today scientists and managers continue to develop the concept with government agencies and affected sectors (energy, fisheries, tourism, conservation). In the US, the initiative is viewed as an opportunity to demonstrate that energy and other economic interests can coexist with marine conservation. Through the use of marine spatial planning, the network would allow multiple uses based on sound science, take into account current management measures under other authorities, allow current energy industry operations to continue and also allow future, environmentally sound access to protected areas. The initiative would also improve marine and coastal resource governance by providing a framework of collaboration and coordination for the many federal and state agencies already involved in marine management and conservation throughout the Gulf.

From a legal perspective, the US could use the National Marine Sanctuaries Act 1972 (16 USC 1431-1445) to designate an MPA network under US jurisdiction. This would give the National Oceanographic and Atmospheric Administration (NOAA), the US federal agency in charge of national marine sanctuaries, the oversight authority to design and implement a management planning process through an extensive consultation process, including the establishment of a multi-stakeholder public advisory council.

At the international level, consultations continue among scientists and managers for coordinated planning and information sharing. Legal and administrative processes for each country will be governed by their national systems. Expectations are high that an international network of MPAs will be formally created by appropriate legal or administrative instruments in the coming decade. Such a network will enhance administrative coordination and help draw additional resources to support science and management activities across the entire region. It will also facilitate increased international collaboration among the countries in the Caribbean and the Gulf whose activities directly impact the health of the region's marine waters and marine resources.

Source: Ritchie and Keller, 2008.

In marine environments that are attractive for tourism because of coral reefs, underwater archaeological sites or favourable beaches, specific attention is needed in MPA legal provisions to ensure that tourist activities are conducted in an ecologically sustainable manner, whether authorized by general rules or by written permit. IUCN guidelines have identified a number of actions that promote ecologically sustainable tourism, and these actions can be incorporated in MPA legal provisions related to the responsibilities and functions of MPA authorities (see Kelleher, 1999):

- (a) Ensure that economic and employment benefits of tourism accrue mainly to local resource users, so as to give them an incentive to conserve;
- (b) Serve as brokers to bring the tourism industry and local people together, rather than trying to be direct tourism providers;
- (c) Educate the tourism industry and gain their participation in understanding the dependence of their sector on protection of the natural environment;
- (d) Encourage the industry to develop and adopt codes of environmental practice (many such codes already exist) and advise the industry on such codes. Consider endorsing the codes as 'green' or 'sustainable' tourism codes of good environmental practice;
- (e) Use leaders in the tourism industry to maintain peer pressure on all tourism operators and also on other related sectors, for example, hotels, boating operations, taxi companies;
- (f) Carefully assess and protect those recreational values for the community and public at large that should not be controlled by private-sector operations but should be free to all citizens, for example, sacred sites, family recreational areas.

Bioprospecting in the marine environment is another area of growing commercial interest, where the regulation of activities is increasingly important. Where bioprospecting is a possibility, MPA legal provisions or other legislation should provide for strong controls and safeguards, using international standards where appropriate, with details laid out in regulations or other subsidiary instruments, as needed. These regulations should include regular reporting requirements, the use of sustainable collection practices with minimum impact on the site, provisions for employment of local people, scientific information and technology sharing and transfer, training for domestic scientists and joint

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research involving domestic and foreign scientists, the payment of fees for taking samples and for exploratory activities, and benefit sharing (see Salm et al., 2000, p. 139).

- 223 For the purpose of addressing regulatory needs with respect to other issues that may exist or can be anticipated for the marine and coastal protected areas network, the legal drafter may want to review Part III, Chapter 1, section 9, which discusses generic considerations for regulated activities in protected areas of all types.

4.9 Compliance and enforcement

- 224 Marine and coastal protected area networks present special challenges for compliance and enforcement. Sites may be widely dispersed across extensive bodies of water where monitoring and surveillance by government agencies is difficult and prohibitively expensive, requiring specially trained personnel, access to appropriate vessels or aircraft, or high-tech equipment. Normally, the outer marine boundaries of an MPA are not easily demarcated on-site, and not all navigational charts will show clear and accurate boundaries, especially in the case of zones within large sites.
- 225 Surveillance of large offshore areas may require the use of new technologies that apply remote sensing and satellites to track vessels, GPS to accurately identify whether vessels are illegally inside the boundaries of a protected area, and chemical analyses to identify and link specific pollutants to a source. To supplement traditional sources of shipping information (navigation plans, ship logs), the Gully MPA in Canada, for example, monitors positional information received from vessel-based Automatic Identification Systems and other offshore intelligence data collected by several government agencies to track and understand daily vessel traffic patterns in and near the MPA and to communicate with vessels when required (see Gully MPA case study, VanderZwaag and Macnab, 2010). Data from modern surveillance equipment using satellites and other communication technologies is increasingly considered key evidence for prosecution.
- 226 The unique challenges presented by marine and coastal protected areas call for special efforts to promote compliance. This involves building awareness, understanding and partnerships across sectors, levels of government and key stakeholder groups. In this context, two points are worth emphasizing as the legal drafter develops provisions on compliance and enforcement for MPAs. These points build on the general discussion in Part III, Chapter 1, section 10. First, the legal definition of ‘authorized enforcement officer’ for the purposes of marine and coastal protected areas should include, in addition to the police and authorized MPA officers (as relevant to the local situation), officers of the national coast guard (or equivalent), naval and defence forces, customs and fisheries officers, as well as local community officials who may be trained and authorized for certain marine and coastal enforcement or surveillance responsibilities.
- 227 Second, the legislation should authorize protected area authorities to develop partnership agreements with local communities and traditional and commercial user groups for the surveillance of coastal and marine areas, reporting on suspicious or offending behaviour, and collaborating with enforcement agencies when offences are prosecuted. A key to effective enforcement within marine and coastal protected areas, especially large marine areas, is support for or creation of self-interest in local communities and in private-sector fishing operators to protect the resources for the good of all actors over the long term. This is as relevant for large offshore marine areas as it is for locally established and governed marine or coastal protected areas. In the case of LMMAs, the legislation could authorize the lead MPA authority and local governments to negotiate agreements with clearly defined surveillance and enforcement tasks that are shared with local communities. Where marine and coastal enforcement

tasks may include police powers, formal training and certification by police authorities would also be required.

Reaching out to stakeholders as partners in promoting compliance expands considerably the outreach capacity of the MPA authority. Broad public and stakeholder participation in surveillance and monitoring benefits from an education strategy. Stakeholders need to understand the purpose of the marine and coastal protected areas network, activities that are permitted and prohibited in different sites, where the boundaries are located, and the benefits of increased collaboration in surveillance and compliance. Such partnerships are most effective and long-lasting when the groups concerned have been involved in MPA design and management decisions from the beginning. These partnerships may be formalized, as appropriate, with co-management agreements specifically for surveillance, monitoring, reporting and data collecting. 228

4.10 Special financial considerations

Governments should provide core financing from general revenues to support the protected areas system, including marine and coastal protected areas, as an ongoing commitment to advance the public interest (see Part III, Chapter 1, section 12). 229

In most countries, additional financial opportunities also need to be developed to supplement government funding. In marine areas, tourism fees, a portion of fisheries licence or leasing fees, and fees for scientific research should be among the sources of additional revenues. Where feasible, legislation should provide that such fees will be used for the management and maintenance of the marine and coastal protected areas network. For example, fees for the Great Barrier Reef Marine Park are built into tourism permits and are returned to the park to support its management needs. 230

In countries with coral reefs and other marine and beach attractions, the tourism sector may have significant potential to generate funds through visitor fees and charges for certain recreational activities. In such countries, tourism is one of the first economic sectors to benefit from the designation of marine and coastal protected areas for recreational and educational purposes. Where legal systems permit, MPA authorities should be authorized to set and collect fees for tourism activities inside certain MPAs. In addition, MPA authorities should have the duty under the law to manage and control tourism, based on standards for ecologically sustainable tourism, to ensure preservation of the conservation objectives for which the sites were designated. 231

In some countries, fisheries may be a major economic activity. This sector also benefits from MPAs, which preserve or create undisturbed spawning conditions, habitats and feeding sites for economically valuable species, and provide a framework for sustainable management in multiple-use zones. Government licensing fees, particularly for industrial fisheries, may be a significant source of public revenue. Where national fiscal policy permits, a percentage of industrial fishing licence revenues may be allocated to fund MPAs. 232

Many private-sector actors also have substantial economic interests in the sustainability of marine and coastal ecosystems. Efforts could be made to interest private-sector businesses in supporting the MPA network through public-private partnerships for fund-raising and other cost sharing, including for data collection and scientific monitoring, in strictly protected MPAs with no-take zones as well as zones managed for sustainable use. 233

Protected area legislative provisions, or provisions in other legislation, may also authorize the establishment of a special fund which can be used by MPA authorities for management purposes, 234

either tied to specific activities or for general operations. In some countries, legislation for marine and coastal protected areas specifically authorizes the creation of a marine conservation fund and specifies conditions for its use (see Box III(2)-11).

- 235 Biodiversity prospecting, or bioprospecting, presents special challenges for marine conservation. While poorly designed operations can harm high-biodiversity sites, bioprospecting also has the potential to generate significant revenues for the government. Where bioprospecting activities are under consideration, a percentage of research, access or other fees negotiated between the government and the private parties concerned should be allocated for MPA monitoring and management. It should be stressed, however, that such activities require tight controls, monitoring and other safeguards to be clearly stated in permit or licensing agreements, to ensure the protection of the marine environment and the reporting and equitable sharing of benefits with the country or jurisdiction involved.

Box III(2)-11: South Africa's Marine Living Resources Fund

In South Africa, MPAs currently cover approximately 20 per cent of the country's coastline. In 1998, the government established a Marine Living Resources Fund (MLRF) under the Marine Living Resources Act 1998. This move came in response to the rising costs of fisheries management, administration and enforcement.

The MLRF receives funds from levies on fish products, licence fees and permits, fines and confiscations, application and harbour fees, and various transfers from the central government. The Director-General of the Department of Environmental Affairs and Tourism is the statutory accounting officer of the MLRF, a function which has been delegated to the deputy director.

In 2001, the MLRF became a fully fledged public entity, which meant that it was required to comply with the strict accounting requirements of the Public Finance Management Act 1999. Implementation of these strict accounting requirements initially generated considerable debate when the MLRF failed to obtain an unqualified audit for six years and showed a deficit of 65 million rand in the 2005–06 financial year. There were concerns about mismanagement, fraud and corruption. In 2006, the Minister of Environmental Affairs and Tourism was called upon to stabilize the MLRF. This resulted in the fund receiving its first unqualified audit in 2008 and showing a positive accumulated surplus of 29 million rand. This experience bodes well for the future administration of South Africa's MPAs. It may also provide lessons for creating a similar fund for South Africa's terrestrial protected areas, which are currently funded largely through general revenues.

Contributed by Alexander Paterson.

4.11 Harmonization of laws

- 236 It is essential to work towards the compatibility, harmonization and integration of MPA legislation with other laws governing or impacting aspects of the marine environment (for example, fisheries, aquaculture, mariculture, tourism, shipping, ports, mining, coastal development, land-based pollution). In some cases, this may entail designing and negotiating amendments in other sector-specific legislation to address redundancy, overlap, conflict and gaps. The legal drafter will need to give special attention to this task in the context of marine and coastal protected areas. The maze of marine-related laws and regulations and the associated institutional interests in coastal countries present a special challenge. The goal is to create consistency within the national legal framework, and between national laws, local rules and customary practices, to support marine and coastal protected areas and ensure their sustainability.

Part IV: Transboundary protected areas

Part IV focuses on special legal elements and associated institutional issues with respect to transboundary protected areas (TBPAs) between two or more countries. TBPAs are governed by bilateral, regional or global instruments applicable to the states participating in the transboundary arrangement, as well as by national-level legal measures appropriate for the portion of the site that lies within each state. It is important to consider TBPAs separately in these protected areas legislation guidelines because of the special legal issues arising from their transnational dimension. For the national dimension, elements already covered in prior Parts of these guidelines would apply.

Introduction

This Part begins with information on the growth of TBPAs. Section 2 reviews progress being made at the international level to harmonize TBPA approaches with definitions, a typology and a global TBPA network. Several management principles are highlighted in Section 3 for the legal drafter to keep in mind when advising on TBPA arrangements. Section 4 surveys key treaties and programmes that promote and support efforts of states to establish TBPAs. Section 5 then turns to specific elements the legal drafter should consider when preparing, reviewing or advising on international documents associated with the establishment and management of TBPAs. These elements relate to the type of possible TBPA arrangements, the different institutions that may be involved and key areas where cooperation is particularly important. The Part closes with emphasis once more on the need to harmonize the TBPA rules and operations of partnering states if TBPAs are to be effective in meeting their conservation and other goals over the long term.

Two reference documents are worth special note here. First, IUCN published comprehensive guidelines on TBPAs in 2001 (Sandwith et al., 2001). These guidelines are based on the joint work of the IUCN World Commission on Protected Areas (WCPA) and the IUCN Commission on Environmental Law (CEL). They provide important guiding principles and concepts for establishing and managing TBPAs, as well as a draft template for a legal framework for TBPAs whether in times of peace or conflict. Their purpose is to explore possibilities for TBPAs to help build relations across countries in other areas besides conservation, including peaceful cooperation, as long as the primary objective of conservation prevails. Many of these framework elements are applicable or adaptable for use with TBPAs generally. The 2001 guidelines continue to be a main reference for law and policy considerations associated with TBPAs, and have been drawn upon extensively for the legal issues discussed below.

Second, in 2006, IUCN produced a follow-up guide, analysing specific security concerns related to TBPAs (Braack et al., 2006). This guide builds on the 2001 publication and draws upon the results of several workshops. The 2006 guide, which is also a main reference for this Part, describes key threats to TBPAs from both natural and human causes, the security implications of such threats, and how they can be addressed by legal, institutional and other means, along with the key agencies normally involved. It is worthwhile for legal drafters working with protected area and other government authorities on TBPAs to consult these guides for in-depth coverage of the issues surveyed here.

1 Growth of TBPAs

- 4 According to the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC) inventory of TBPAs, the growth of TBPAs and associated transboundary conservation initiatives worldwide has been significant in the last decade. In the late 1980s, 59 transborder areas were identified by IUCN as TBPAs (made up of 70 individual protected areas). This number grew to 169 (involving 666 individual protected areas) by 2001, and to 188 (involving at least 818 individual sites) by 2005 (GTPAN, 2007c).
- 5 The most recent UNEP-WCMC inventory of TBPAs (UNEP-WCMC, 2007) identifies 227 TBPA complexes (TBPAs and other sites linked by various transboundary conservation initiatives). These complexes incorporate 3,043 individual protected areas and internationally designated sites. The inventory is based on a review of the digital maps available in the World Database on Protected Areas (WDPA).

Box IV-1: Growth in TBPAs in Central America

Within the seven countries of the Central America region, several TBPAs have been formally established in recent decades and additional sites are being considered.

Sites that have been established

- 1 La Fraternidad Biosphere Reserve in the region of Trifinio (El Salvador, Guatemala, Honduras, 1987);
- 2 La Amistad Biosphere Reserve and National Park (Costa Rica 1989; Panama 2000);
- 3 International System of Protected Areas for la Paz (Sistema Internacional de Areas Protegidas para la Paz, or SIAPAZ) (Costa Rica, Nicaragua, 1989).

Sites under consideration

- 1 Rio Coco/Bosawas/Rio Platano/Tawaka, between Honduras and Nicaragua, also known as Reserva de la Solidaridad;
- 2 Chiquibul/Montanas Maya area between Guatemala and Belize;
- 3 Protected Areas System of the Great Peten (Sistema Integrado de Areas Protegidas de El Peten or SIAP) between Mexico, Guatemala and Belize, covering the areas of Calakmul, Miarador/Rio Azul and Rio Bravo/Lamanai.

These various initiatives are coordinated through the Central American Protected Areas System (Sistema Centroamericano de areas protegidas, or SICAP). This regional group is led by the Central American Commission on Environment and Development, headed by the ministers of environment of the states in the region.

In addition, the region is home to the Mesoamerican Biological Corridor (MBC), a large habitat corridor stretching from Mexico south-eastward through most of Central America, and connecting several public and private protected areas, buffer zones and multiple-use areas.

The MBC was officially recognized by heads of state of the countries in the region in a statement issued at the conclusion of their 1997 summit. In the statement, they described the MBC as follows:

a territorial planning system consisting of natural protected areas under a special regime whereby core, buffer, multiple use and corridor zones are organised and consolidated in order to provide an array of environmental goods and products to the Central American and global societies, offering spaces for social harmonisation to promote investments in the conservation and sustainable use of natural resources (Godoy Herrera, 2003).

The MBC was launched in 1998 to promote investment in the conservation and sustainable use of the region's natural resources. Its aim is to improve the quality of life of the inhabitants in the region.

For further information on country activities, see the Central American Commission on Environment and Development website.

Contributed by Pedro Solano.

- 6 The 2007 UNEP-WCMC inventory includes both TBPAs that fit entirely into the IUCN requirement that international cooperative or sympathetic management should be confirmed through legal or other effective means, as well as those sites with adjoining protected areas that may still require the

development of collaborative efforts or formalization of ongoing cooperation. To qualify for inclusion in the UNEP-WCMC 2007 list, the protected area had to:

- (a) conform to the IUCN definition of a protected area (IUCN, 1994) and be designated either under national legislation or international or regional conventions or initiatives such as the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972), and the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Man and the Biosphere (MAB) Programme;
- (b) be included in the WDPA as a geo-referenced entity; and
 - be adjacent to an international boundary and adjacent to a protected area in a neighbouring country, or
 - be directly adjacent to, or overlap partially or entirely with, an area qualifying under (a), or
 - be contained within an area qualifying under (b) (GTPAN, 2007c).

In addition, for the 2007 inventory, a number of non-adjacent pairs or groups of sites that had been identified in earlier years but not yet geo-referenced were re-evaluated on a case-by-case basis. These sites were added if they qualified.

As these data show, growth in numbers has been impressive. Moreover, the recent application of geographic information systems (GIS) technology to identify sites and to digitally record coordinates has eliminated the problem of double-counting areas assigned two or more designations (for example by national legislation and under an international convention).

All regions of the world have seen growth in TBPA. One of the most active regions in recent years has been Central America (see Box IV-1).

2 Approaches to TBPA

It is broadly recognized that a variety of approaches can be used to establish TBPA. The common theme is the linkage across national or international borders. Each area presents unique challenges for cross-border cooperation because of the different legal systems, biophysical features, socio-economic systems, cultures, political approaches, land tenure arrangements and historical traditions involved. As characterized by the Global Transboundary Protected Areas Network, “there can be no ‘cookbook’ approach to transboundary conservation” (GTPAN, 2007a).

Since the 1980s, efforts have advanced to standardize the international system of defining and recording TBPA. There has been much progress in building a global network to share lessons and continue to develop guidance on approaches and strategies. For the legal drafter developing provisions for TBPA, it is important to review these developments.

2.1 IUCN definition

The 2008 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) provide a general definition for protected areas that updates the IUCN definition issued in 1994 (see Part I, section 1). The guidelines indicate that all protected areas, including TBPA, should fit within the following definition:

A protected area is a clearly defined geographical space recognized, dedicated and managed, through legal and other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values (Dudley, 2008, p. 8).

- 13 IUCN provides further guidance specifically for TBPAs (see Sandwith et al., 2001). For the purposes of these protected areas legislation guidelines, the following are core features of a TBPA:
- (a) straddles one or more borders between:
 - countries, and
 - may include areas beyond national jurisdiction (for example, high seas);
 - (b) whose constituent parts are—
 - especially dedicated to nature conservation and the protection and maintenance of biological diversity and associated cultural resources, and
 - managed cooperatively through legal or other effective means.

2.2 Typology for TBPAs

- 14 While there has been considerable progress in developing a general definition for TBPAs, there has been less progress in understanding various approaches and arrangements for establishing and managing TBPAs, and no internationally established typology has been developed. Various approaches are being

Box IV-2: Examples of the IUCN typology of TBPAs

Two or more contiguous protected areas across a national boundary

This is what most people visualize when they hear about a TBPA, but it is only one model. An example is the W Transboundary Biosphere Reserve (TBR), which is shared by Benin, Burkina Faso and Niger, and is being managed cooperatively for common conservation aims (see the W TBR case study accompanying these guidelines: Michelot and Ouedraogo, 2010).

A cluster of protected areas and the intervening land

This type of TBPA aims to balance strict protection with sustainable management in buffer zones and other parts of the landscape. The World Bank is involved in such a project in the West Tien Shan Mountains of Central Asia, focused on four protected areas and extending over parts of Kazakhstan, the Krygyz Republic and Uzbekistan.

A cluster of separated protected areas without intervening land

It is not always politically or practically possible to include intervening land, and some successful transboundary initiatives have involved protected areas that are geographically separated but share common ecology or problems, and usually have some interchange between species. An example currently under development with support from IUCN is a transboundary initiative in the Great Lakes region of Africa, involving Kibira National Park in Burundi, Virunga National Park in the Democratic Republic of Congo and Volcanoes National Park in Rwanda, all of which have common management aims but no control over intervening farmland.

A transborder area including proposed protected areas

Some transboundary initiatives have started with protected areas in one country or region, with the hope of extending protection across the border, but without any formal agreement. This might be a transitional stage, with the area later becoming, for example, two or more contiguous areas across a national boundary. The Pha Taem Trans-Border Initiative, between Cambodia, Laos and Thailand, is developing a complex that includes four existing and one proposed protected area in Thailand as well as proposed protected areas in Cambodia and Laos.

A protected area in one country aided by sympathetic land use over the border

Sometimes there will be no realistic expectation (or perhaps no need) for protected areas on both sides of a border, but a need for sympathetic management in one country to safeguard a protected area in a neighbouring country. An example is in the island of Borneo, where improved forest management on the Malaysian side of the border is helping to preserve wildlife populations in the adjoining Kayan Mentarang National Park in Indonesia.

Source: GTPAN, 2007b.

pursued for transboundary conservation, ranging from cooperation between adjoining protected areas in different countries, to compatible land uses in two or more countries contributing to biodiversity conservation. The more that is being learned about conservation across borders, the greater is the

appreciation of the variety of transboundary arrangements possible. As a working classification system, IUCN-WCPA has joined with others to develop a draft typology of TBPAs. These are noted below, with examples of each in Box IV-2.

- (a) Two or more contiguous protected areas across a national boundary
- (b) A cluster of protected areas and the intervening land
- (c) A cluster of separated protected areas without intervening land
- (d) A transborder area including proposed protected areas
- (e) A protected area in one country aided by sympathetic land use over the border.

2.3 Global TBPA network

The world community has recognized the need to strengthen transboundary conservation efforts, harmonize approaches and share lessons learned. At the Vth IUCN World Parks Congress (WPC) in 2003, countries and international organizations adopted a recommendation calling for the creation of a global network to support the development of transboundary conservation initiatives, to share lessons and continue to develop appropriate approaches and strategies (IUCN-WPC 2003 V.11). This recommendation also calls upon governments, non-governmental organizations (NGOs), international organizations and development agencies, and specifically IUCN, to develop with broad consultation an international enabling framework and internationally recognized designation system or registry of transboundary conservation areas (IUCN-WPC 2003 V.11, para. 4). In response, the IUCN-WCPA Task Force on Transboundary Protected Areas, established in 2000, launched a new initiative in 2004 for the development of the Global Transboundary Protected Areas Network. (For further information, see the Global Transboundary Protected Areas Network website.)

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The Vth IUCN-WPC also stressed the need to develop more TBPAs. It called for promoting the establishment of TBPAs in all continents and oceans, and for international action to promote regional agreements and governance structures to support TBPAs (Durban Action Plan, IUCN-WPC 2004, pp. 242, 258). With the goal of linking protected areas with wider ecological and environmental systems, the WPC also called for establishing new or strengthened agreements for transboundary cooperation, especially with regard to regional seas, mountain chains, and shared watersheds and river basins (Durban Action Plan, IUCN-WPC 2004, p. 241).

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Since these calls for action, significant progress has been made on a number of fronts. Besides the creation of the Global Transboundary Protected Areas Network, a common definition and a draft typology of approaches have been developed and are now increasingly being used at the operational level. In addition, the UNEP-WCMC inventory of TBPAs has been standardized. The benefits and challenges of TBPAs are being better understood as data are gathered and experiences are documented. These advances are relevant background for legal drafters and protected areas managers working with TBPAs.

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Another important development is the international recognition that an increasing number of TBPAs are receiving under international conventions and programmes, and in regional networks. The main conventions recognizing transboundary sites are the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971) and the World Heritage Convention, with the UNESCO MAB Programme also recognizing transboundary biosphere reserves (TBRs). At the international and regional levels, another emerging sphere of legal activity in transboundary conservation is the creation and expansion of ecological corridors and networks for connectivity conservation.

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2.4 Global and continental connectivity

- 19 Conservation scientists and protected area managers working in biodiversity conservation recognize the importance of the global and continental connectivity of nature, species and ecosystems. The global and continental dimension of connectivity conservation is concerned with identifying and conserving sites, whether on land or sea, that may not necessarily be adjacent but are linked by important ecological or other conservation functions. This is a fundamental principle in the field of conservation and ecology. A broad view of connectivity conservation is also being recognized in international law as a means to protect specific species and habitats worldwide. One of the important international conventions for this purpose is the Convention on the Conservation of Migratory Species of Wild Animals (CMS) (1979), which aims to protect species and their habitats throughout their range (see Part I, section 5.1.4).
- 20 As global threats, including climate change and other global change factors, impact species and habitats worldwide, connectivity conservation areas on this larger scale will need to be considered. TBPAs are one tool that can help support global and continental connectivity conservation.
- 21 This growing interest in the global aspects of connectivity conservation calls for new kinds of international agreements that preserve global and continental corridors by conserving areas that may not be adjacent or semi-adjacent, but are distant sites linked by shared functions. These functions may increasingly also include evolutionary process connectivity to permit gene flow and range expansion, particularly in the face of global change.
- 22 While beyond the scope of these protected areas legislation guidelines, the global or continental dimension of connectivity conservation is an emerging area for legal drafters to consider, since it is likely to broaden the concept of TBPA law. Already, the concept is being incorporated into some of the European legal instruments in place for ecological corridors and networks (see section 4, below).

3 Key management principles of legal relevance

- 23 IUCN-WCPA guidelines on protected area management categories (Dudley, 2008) and IUCN's two publications specifically on TBPAs (Braack et al., 2006; Sandwith et al., 2001) provide several principles for the design and management of TBPAs. While such guidance materials are advisory and must be adapted to suit the conditions within each country, a few general principles emerge. The elements noted below are especially relevant for transboundary cooperative agreements and other legal or administrative arrangements with partner states where the legal drafter is involved, either in a drafting or advisory role.
- 24 **IUCN protected area management categories apply.** TBPAs should fit the general IUCN definition of protected areas. The IUCN system of protected area management categories should also be applied when reporting on TBPAs that meet the IUCN definition and for managing components of a TBPA within the national protected areas system. (For a description of the IUCN system of protected area management categories, see Table I-2 in Part I, section 3.)
- 25 **Identifying common natural values.** All TBPAs share some natural resources, ecosystem services, landscape or seascape features, species, or common cultural values. The existence of a shared resource (for example, water body, mountain, desert, rare mammal habitat, coral reef) is a sound reason for cooperation in the management of that resource and the area as a whole.
- 26 **Issues of scale for ecosystem maintenance and connectivity.** A larger contiguous TBPA will better safeguard biodiversity using the ecosystem approach, since very large areas are better able to maintain

minimum viable populations of wild species, sustain marine system functions and genetic diversity, and support ecological corridors and related connectivity conservation needs.

Begin with adjacent protected areas. In many cases, formally established protected areas exist on either side of a border between states. Adjoining protected areas present one of the most straightforward opportunities to start exploring options for a TBPA. 27

Pursue early integrated planning across borders. It is important for coordination across jurisdictions to begin at the earliest possible stage of protected areas establishment to avoid the risk of incompatible activities on either side of the border. For example, a strictly protected wilderness area on one side of the border, with a multiple-use area on the other, would defeat or compromise the conservation objectives of the former. As explained in the IUCN guidelines on TBPAs, “coordinated planning can reduce this risk and ensure that the partners develop an appreciation of the relative biophysical, political, social and economic context of the protected areas” (Sandwith et al., 2001, p. 28). 28

Bring communities together across political boundaries. Many communities live across political borders that have created artificial divisions, separating families and peoples. While TBPAs are an important tool for maintaining or restoring ecosystems and species habitats separated by political boundaries, they can also serve to reunite communities and peoples, rebuild common understanding and values, and advance livelihoods. 29

Involve and benefit local communities. For all protected areas, including TBPAs, community involvement is essential in policy formation, and in protected area planning and management. This is a well-established principle supported by extensive literature (see the works cited in Sandwith et al., 2001, p. 19). Key elements of this principle include early engagement and dialogue; identification of potential problems related to customary resource rights, and disputes especially related to security and border policies; and identification of opportunities for sustainable economic development that could bring benefits to local communities in and adjacent to the TBPA. 30

Accommodate global change and global threats. As climate change and other global change factors impact areas that are important for biodiversity conservation, TBPAs will need to be considered for their potential role as part of broader continental-scale conservation efforts. TBPAs may in some cases also be able to support the purposes of international conventions such as the CMS which currently relies on national protected areas established along migratory routes. Presently there is no specific international legal regime for global or continental transboundary conservation initiatives. 31

Harmonize laws and programmes across countries. Cooperation for the establishment and management of TBPAs is significantly facilitated by laws and programmes that are harmonized and compatible. Conflicting legal provisions may present major difficulties that impede and reduce the effectiveness of transboundary cooperation. 32

4 Supportive international law and policy

There is no specific international legal regime for TBPAs. However, several major multilateral conventions and programmes either contain obligations related to TBPAs or promote their development to advance their conservation objectives. Such instruments include the Convention on Biological Diversity (CBD), Ramsar Convention, World Heritage Convention, CMS and United Nations Convention on the Law of the Sea (UNCLOS) (1982), as well as European regional ecological networks and the UNESCO MAB Programme. (These conventions and programmes are discussed at length in Part I, in relation to legal obligations and policy guidance for national protected area systems.) 33

- 34 It is important for arrangements that establish TBPAs to take into account such multilateral obligations and utilize the associated guidelines to build support regionally, inform the design and content of cooperative agreements and related processes, and promote the development of sites that can be recognized internationally.

4.1 Convention on Biological Diversity

- 35 While the text of the CBD does not speak directly about TBPAs, the concept receives considerable attention in the CBD Programme of Work on Protected Areas, and the CBD Programme of Work on Marine and Coastal Biological Diversity.

- 36 **Programme of Work on Protected Areas.** This programme of work identifies TBPAs as an important tool for implementing the ecosystem approach, which the CBD uses as a primary framework for action. The provisions related to TBPAs are significant. For instance, a key provision specifies:

the establishment and management of protected area systems in the context of the ecosystem approach should not simply be considered in national terms, but where the relevant ecosystem extends beyond national boundaries, in ecosystem or bioregional terms as well. This presents a strong argument for and adds complexity to the establishment of transboundary protected areas and protected areas in marine areas beyond the limits of national jurisdiction (CBD COP 2004 VII/28, Annex, para. 8)

- 37 Parties are urged to establish and strengthen regional networks of TBPAs (CBD COP 2004 VII/28, Annex, goal 1.3). A target date of 2010 is set for this goal for terrestrial TBPAs and 2012 for transboundary marine protected areas (MPAs). The CBD programme of work also calls upon Parties to cooperate with neighbouring countries to establish an enabling environment for TBPAs and similar transboundary approaches (CBD COP 2004 VII/28, Annex, activity 3.1.11).

- 38 **Programme of Work on Marine and Coastal Biological Diversity.** This programme of work addresses TBPAs as a governance tool for marine and coastal management. Specifically, it calls upon Parties to build coordinating mechanisms for transboundary areas, stating:

Good governance will depend on having one or more bodies, each with the authority and capacity to undertake their responsibilities. When there is more than one body, including, in the case of transboundary areas, bodies in different countries, mechanisms for coordinating and integrating management will be vital (CBD COP 2004 VII/5, Annex II, para. 5)

It also requires that global data on marine and coastal protected areas be improved in such critical categories as location (physical coordinates) and country or political unit, including the names of neighbouring countries in the case of transboundary marine and coastal protected areas (CBD COP 2004 VII/5, Annex III, para. 2(a)).

4.2 Convention on Wetlands of International Importance especially as Waterfowl Habitat

- 39 The Ramsar Convention calls for international and cross-border consultation and coordination with respect to the designation of wetlands of international importance. Article 5 states:

The Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.

- 40 In 1999, in support of this Article, Parties adopted guidelines for international cooperation, which included establishing and cooperatively managing transboundary areas for ecosystems and species. These guidelines provide:

**Table IV-1: Collaborative international management of adjacent Ramsar sites—
transboundary Ramsar sites**

Contracting Parties	Individual Ramsar sites and designation	Transboundary Ramsar site name (if any)	Instrument concluded
Hungary Slovakia	Baradla Cave System and related wetlands (2001) Domica (2001)		14 Aug. 2001 18 Jan. 2001
Hungary Slovakia	Felso-Tisza (Upper Tisza) (2004) Tisa River (2004)	Upper Tisza Valley	6 Nov. 2003
Belgium Luxembourg	Vallee de la Haute-Sure (2003) Vallee de la Haute-Sure (2003)	Vallee de la Haute-Sure	8 March 2004
Austria Czech Republic Slovakia	Donau-March-Thaya-Auen (1982) Untere Lobau (1982) Mokradý dolniho Podyji (floodplain of lower Dyje River) (1993) Moravske luhy (Morava flood plains) (1993)	Trilateral Ramsar Site Floodplains of the Morava-Dyje-Danube Confluence	30 June 2004
Estonia Latvia	Nigula Nature Reserve (1997) Sookuninga Nature Reserve (2006) Northern bogs (Ziemelu Purvi) (2002)	North Livonian Transboundary Ramsar Site	27 Dec. 2007 31 July 2006
Hungary Slovakia	Ipoly Valley (2001) Poiplie (1998)		2 Feb. 2007
Belarus Ukraine	Prostyr (2005) Prypiat River Floodplains (1998) Stokhid River Floodplains (1995)	Stokhid-Prypiat-Prostyr	4 Jan. 2008 1 Feb. 2008
Austria Germany	Bayerische Wildalm and Wildalmfilz (2004) Bayerische Wildalm (2007)	Austrian-Bavarian Wildalm	7 Aug. 2008
France Germany	Rhin superieur/Oberrhein (2008) Oberrhein/Rhin superieur (2008)	Rhin superieur/ Oberrhein- Oberrhein/ Rhin superieur	28 Aug. 2008
Gambia Senegal	Niumi National Park (2008) Delta du Saloum (1984)	Niumi-Saloum	26 Jun. 2008 21 Oct. 2008
Czech Republic Poland	Krkonoska ra raseliniste (Krkonosze mountains mires) (2003) Subalpine peatbogs in Karkonosze Mountains (2002)	Krkonosze/Karkonosze subalpine peatbogs	17 Sep. 2009 14 Sep. 2009
Austria Hungary	Neusiedler See-Seewinkel (1982) Lake Ferto (1989) Nyirkai-Hany (2006)	Transboundary Ramsar Site Neusiedler See- Seewinkel – Ferto- Hansag [“Ferto-Hansag hataron atnyoulo ramsari terulete”; “Grenzuberschreitendes Ramsar-Gebiet Newsiedlersee- Seewinkel-Waasen”]	12 Nov. 2009

Source: Ramsar Secretariat, undated.

- **For transboundary wetlands:** Parties are urged to identify all shared wetland systems, including those in the coastal zone, and to cooperate with adjoining jurisdictions in their management. Cooperation may extend to formal joint management arrangements or collaboration in the development and implementation of a management plan for the site (Ramsar COP 1999 VII.19, Annex, s. 2.1.1).

- **Transboundary river basins:** In the same way that Contracting Parties are urged to identify and cooperate in the management of international wetlands, there is an expectation that cooperation will be pursued for international river basins and shared coastal systems (Ramsar COP 1999 VII.19, Annex, s. 2.1.2).
- **Shared wetland-dependent species:** A priority under the Ramsar Convention is international cooperation in the management of shared species, particularly for migratory waterbird conservation. In addition, the guidelines recognize that there are non-migratory species which have a limited range and are found in transboundary wetlands or in adjoining countries where cooperation in the management of such sites is critical (Ramsar COP 1999 VII.19, Annex, s. 2.2, para. 15).

41 Parties are increasingly designating new and existing Ramsar sites as transboundary Ramsar sites. A transboundary Ramsar site is defined to mean an ecologically coherent wetland that extends across national borders, where the site authorities on both or all sides of the border have formally agreed to collaborate in its management, and have notified the Ramsar Secretariat of this intent (see Ramsar Secretariat, undated). These agreements focus on cooperative management arrangements and do not change the distinct legal status of each Ramsar site within its national system. (For a list of transboundary Ramsar sites as of January 2010, see Table IV-1.)

4.3 World heritage sites

42 The World Heritage Convention recognizes world heritage sites that cross national borders. A TBPA may be listed as a world heritage site where it meets the criteria for listing sites generally, as provided by Convention rules. The Convention's Operational Guidelines provide:

A nominated property may occur:

- a) on the territory of a single State Party, or
- b) on the territory of all concerned States Parties having adjacent borders (UNESCO, 2008b, para. 134).

43 The guidelines further state that, wherever possible, transboundary nominations should be prepared and submitted by States Parties jointly in conformity with the Convention, and that it is highly recommended that States Parties establish a joint management committee or similar body to oversee the management of the whole of a transboundary property. In addition, extensions to an existing world heritage property located in one State Party may be proposed to become transboundary properties (UNESCO, 2008b, para. 134–135).

44 Transboundary sites under the World Heritage Convention have tended to focus on natural sites. For example, in Europe, they include:

- Belfries of Belgium and France;
- Belovezhskaya Pushcha National Park, Belarus and Poland;
- Caves of Aggtelek and Slovensky kras, Hungary and Slovakia;
- Cultural landscape of Ferto/Neusiedlersee, Austria and Hungary;
- Curonian Spit, Lithuania and the Russian Federation;
- Frontiers of the Roman Empire, Upper Rhine, Rhaetian lines and Hadrians Wall, Germany and the UK;
- High coast and Kvarken archipelago, Sweden and Finland;
- Muskauer Park/Park Muzakowski, Poland and Germany;
- Pyrenees, Mont Perdu, France and Spain;

- Struve Geodetic Arc, Belarus, Estonia, Finland, Latvia, Lithuania, Moldova, Norway, Sweden, the Russian Federation and Ukraine;
- Rhaetian Railway, Italy and Switzerland;
- Wadden Sea, Netherlands, Germany and Denmark.

Box IV-3: The Wadden Sea TBPA—trilateral cooperation

The Wadden Sea is Europe's largest wetland of international importance designated under the Ramsar Convention. It covers more than 1 million hectares of tidal mudflats in the south-eastern part of the North Sea, from the Netherlands in the south, along the coastlines of Germany and then to its northern boundary in Denmark. It includes a chain of islands, called the Wadden Sea Islands, many of which have human settlements and land use practices specifically adapted to the islands. The region features the world's largest unbroken stretch of tidal flats and salt marches, and provides critical habitat for dozens of migratory bird species. It is one of the world's most significant areas for migratory birds and is connected to a network of other important sites for migratory birds. It is a breeding and wintering area for up to 12 millions birds annually, and supports more than 10 per cent of the flyway population of 29 species of migratory birds. The site is one of the last remaining large-scale, intertidal ecosystems where natural processes continue to function largely undisturbed.

Since 1978, Denmark, Germany and the Netherlands have been working together on the protection and conservation of the Wadden Sea region through cooperative arrangements covering management, monitoring, research and policy. In 1982, the three countries agreed on the Joint Declaration on the Protection of the Wadden Sea, declaring their intention to coordinate activities and measures to implement a number of legal instruments (including international conventions and European directives) for the comprehensive protection of the Wadden Sea region as a whole, including its flora and fauna. The guiding principle of the Declaration is to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way.

The core of the region's conservation area is comprised of the Danish Wadden Sea Nature and Wildlife Reserve, the Dutch Wadden Sea Conservation Area, and the German Wadden Sea National Parks of Lower Saxony and Schleswig-Holstein. The institutional structure of the Wadden Sea Trilateral Cooperation is led by a Trilateral Governmental Conference, the central policy-making body comprised of the minister in charge of protection of the Wadden Sea from each of the three participating countries. The Common Wadden Sea Secretariat was established in 1987 by administrative agreement to facilitate and support the Trilateral Cooperation. A Trilateral Working Group and a number of other specialized working groups also exist for specialized monitoring and other functions under the Cooperation.

The Secretariat is responsible for the collection and assessment of information concerning Wadden Sea protection, management and monitoring. It coordinates trilateral initiatives in relevant international organizations and facilitates international cooperation. It oversees and monitors progress in the implementation of the framework Trilateral Wadden Sea Plan adopted in 1997. This plan laid out policies, measures, projects and actions agreed upon by the three countries to advance joint efforts for protection and sustainable management of the common ecosystem. The plan was structured around targets for 10 specific categories: landscape and culture, water and sediment, salt marshes, tidal areas, beaches and dunes, estuaries, offshore areas, rural areas, birds, and marine mammals. In 2010, the 11th Trilateral Governmental Conference adopted a revised Wadden Sea Plan, updating the trilateral policies and management actions laid out in the first plan. The new plan adds 'fish' as an eleventh target area, and incorporates measures to support actions to tackle new challenges arising from invasive alien species and the effects of climate change in the coastal area, including sea level rise.

Importantly for law and policy, decisions on protection and management of the Wadden Sea are taken in accordance with seven management principles formally adopted by the Parties and contained within the Trilateral Wadden Sea Plan:

- Careful Decision Making (on the basis of the best available information),
- Avoidance (avoid potentially dangerous activities),
- Precaution (avoid activities assumed to have significant damaging impact even without sufficient scientific evidence to prove a causal link),
- Translocation (translocate harmful activities to areas where they will cause less environmental impact),
- Compensation (unavoidable harmful effects of activities should be compensated),
- Restoration (where possible, restore if actual situation is not optimal and original state is likely to be re-established), and
- Best Available Techniques and Best Environmental Practice.

For further information, see Common Wadden Sea Secretariat, 2010; see also the Common Wadden Sea Secretariat website; and the UNESCO World Heritage List website.

Contributed by Tanya Baycheva.

- 45 The newest site in the above list, the Wadden Sea, was recognized as a world heritage site in June 2009. Major parts of the Wadden Sea have also been designated as Ramsar sites and as special areas of conservation under the European Union (EU) Habitats Directive, and are included in Natura 2000. The legal and institutional framework for the Wadden Sea TBPA was set up cooperatively through a trilateral agreement, with a trilateral cooperation structure and a common Secretariat (see Box IV-3).

4.4 Convention on the Conservation of Migratory Species of Wild Animals

- 46 The CMS aims to conserve terrestrial, marine and avian migratory species throughout their range, which may frequently be transnational.
- 47 Under the CMS, Parties are obligated to strive towards strictly protecting migratory species threatened with extinction (Appendix I species). This means conserving or restoring the places needed for their migration, mitigating obstacles to migration, and controlling other factors that might endanger such species. The CMS promotes concerted action among Range States in fulfilling these obligations, including cooperation in conservation and protection measures for endangered species habitats.
- 48 Appendix II lists migratory species that need or would significantly benefit from international cooperation. The CMS encourages Range States to conclude global or regional agreements on cooperative protection and management for such species. These actions include establishing TBPA. National reporting requirements for agreements concluded for Appendix II species include identifying transboundary initiatives being undertaken by the reporting Party to protect populations shared with other Range States, including establishing or planning TBPA.

4.5 United Nations Convention on the Law of the Sea

- 49 UNCLOS promotes the protection and preservation of the marine environment within national jurisdiction and on the high seas. Transboundary and high seas protected areas provide an important tool for achieving this objective. (For a detailed discussion of UNCLOS, see Part III, Chapter 2, section 3.1.1.)
- 50 In 2006, under the framework of UNCLOS, the United Nations set up an Ad Hoc Open-ended Informal Working Group to study issues of marine biodiversity conservation beyond national jurisdiction. In 2007, the Working Group generated an expert report, entitled Global Open Oceans and Deep Seabed (GOODS) Biogeographic Classification (UNESCO, 2009), which includes scientific criteria and guidance for identifying MPA sites and networks.
- 51 CBD and UNCLOS institutional mechanisms work collaboratively on these issues. In 2008, CBD Parties adopted the guidelines from the GOODS report for identifying and selecting MPAs, whether within national jurisdiction or in the open ocean.

4.6 European ecological networks on a continental scale

- 52 Europe provides numerous examples of legal and institutional instruments that promote arrangements to establish and support transboundary ecological and other connectivity conservation corridors and networks across the continent. For example, part of the implementation strategy of Parties to the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) (1992) is to promote the establishment of a regional network for MPAs. Additional examples of important

legal instruments for transboundary networks are noted below. (For a detailed discussion of the OSPAR Convention, see Part III, Chapter 2, section 3.3.2.)

EU Birds Directive and Habitats Directive. These instruments, along with the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979), are the cornerstone of Europe's nature conservation policy. They are the key legally binding tools for the creation of a European network of transboundary ecological and connectivity conservation areas. The Birds Directive and the Habitats Directive form the backbone of the Natura 2000 ecological network which requires EU Member States to propose, designate and ensure the conservation of a network of representative natural sites. Article 10 of the Habitats Directive refers to the concept of corridors, providing that:

53

Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora.

Such features are those which, by virtue of their linear and contiguous structure (such as rivers with their banks, or traditional systems for marking field boundaries) or their function as stepping-stones (such as ponds or small woods) are essential for the migration, dispersal and genetic exchange of wild species.

Bern Convention's Emerald Network. Under the Bern Convention, Parties are to take steps to develop areas of special conservation interest (ASCIs), which have come to be known as the Emerald Network. This network began to be developed following a 1996 decision by the Bern Convention Standing Committee calling for its creation. The network relies on the same principles as the Natura 2000 network and represents its extension to non-EU member states. The Emerald Network's main goals are to identify and conserve core areas and to facilitate the establishment of national networks of protected areas. The Natura 2000 network is considered the EU contribution to the Emerald Network.

54

Pan-European Ecological Network (PEEN). This is one of the largest European ecological networks, having been endorsed by 54 European countries (EAF, undated). PEEN was created following the Environment for Europe Ministerial Conference held in Sofia in 1995, where Member States of the Council of Europe (CoE) endorsed the Pan-European Biological and Landscape Diversity Strategy (PEBLDS). PEEN is a key component of this strategy. The PEBLDS was developed as a regional tool for implementing the CBD, particularly Article 6 on measures for conservation and sustainable use which includes biodiversity strategies.

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An intergovernmental Pan-European expert committee guides the development of PEEN. The CoE, together with the European Centre for Nature Conservation (ECNC), coordinates establishment of the network within the framework of the PEBLDS. PEEN aims to ensure that:

56

- a full range of ecosystems, habitats, species and landscapes of European importance are conserved;
- habitats are large enough to place species in a favourable conservation status;
- there are sufficient opportunities for the dispersal and migration of species;
- damaged parts of key environmental systems are restored;
- key environmental systems are buffered from potential threats.

PEEN is built on three components or zones that are to be functionally complementary: (1) core areas that provide "the optimal achievable quantity and quality of environmental space"; (2) corridors "to ensure appropriate interconnectivity between the core areas"; and (3) buffer zones "to protect the core areas and corridors from potentially damaging external influences" (Bonnin et al., 2007, p. 21).

57

A Ministerial Statement on PEEN was prepared as an annex to the Kyiv Biodiversity Resolution for adoption at the Fifth Ministerial Conference "Environment for Europe" at Kyiv, Ukraine, in 2003. The

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Kyiv Resolution includes the commitment that all core areas of PEEN would be adequately conserved and, towards that end, that PEEN provide guidance to all major regional, national and international land use and planning policies, as well as to the activities of the relevant economic and financial sectors. The Ministerial Statement recognizes the importance of having synergy with the Emerald Network under the Bern Convention and EU's Natura 2000 when building PEEN, and gives strong support to its development.

59 PEEN is implemented through existing international instruments that provide for the protection of important sites in Europe, particularly Natura 2000 and the Emerald Network, along with regulations within the legal framework of the CoE and the EU. Through this approach, PEEN aims to promote harmonization among these several instruments and regulations. The goal is to create an ecological network at the European scale in 20 years.

60 **European Landscape Convention.** This convention was adopted in 2000 and entered into force in 2004. It is open to member states of the CoE, and to the European Community and European non-member states. It is the first international treaty to be exclusively concerned with all dimensions of European landscape. The Convention applies to the entire territory of the Parties (Art. 2). It covers natural, rural, urban and peri-urban areas, including land, inland water and marine areas, and is concerned with landscapes that might be considered outstanding as well as everyday or degraded landscapes (Art. 2). The aims of the Convention are to promote landscape protection, planning and management, and to organize European cooperation on landscape issues (Art. 3). Reducing the fragmentation of transboundary landscapes is one of the areas of focus.

61 Article 9 relates specifically to transboundary landscapes which are often fragmented through the existence of fences or the practice of clear-felling along borders. It provides that "Parties shall encourage transboundary co-operation on local and regional level and, wherever necessary, prepare and implement joint landscape programmes." Landscape features such as natural water courses, hedges and forest strips often provide biological interconnections so that the protection of ecological corridors is linked to that of landscapes. For this reason, the provisions of the Convention related to transboundary landscapes are useful for the protection of transboundary corridors. The Convention also calls on Parties to integrate landscapes into town and spatial planning (Art. 5). (For further information, see CoE, The European Landscape Convention website.)

62 **Convention on the Protection of the Alps.** This Convention, also known as the Alpine Convention, was adopted in 1991 and entered into force in 1995. It provides a framework setting out the basic principles to be applied to all activities covered by the Convention and contains general measures for sustainable development in the Alpine region. Contracting Parties are Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia, Switzerland and the European Economic Community.

63 Under the Alpine Convention, Contracting Parties shall:

pursue a comprehensive policy for the preservation and protection of the Alps by applying the principles of prevention, payment by the polluter (the 'polluter pays' principle) and cooperation, after careful consideration of the interests of all the Alpine States, their Alpine regions and the European Economic (Art. 2(1)).

Increased transborder cooperation is also stressed, with the Convention providing that transborder cooperation in the Alpine region shall be intensified and extended in terms of both the area and the number of subjects covered (Art. 2(1)).

64 The Convention identifies 12 areas where Contracting Parties are to take appropriate measures to achieve the above objectives: population and culture, spatial planning, prevention of air pollution, soil conservation, water management, conservation of nature and the countryside, mountain farming,

mountain forests, tourism and recreation, transport, energy, and waste management (Art. 2(2)). Implementing protocols have been adopted to advance specific objectives in several of these areas. The Protocol on the Implementation of the Alpine Convention of 1991 Relating to the Conservation of Nature and the Countryside (1994) promotes the establishment of TBPA and ecological networks. In particular, Article 12, entitled 'Ecological Network', provides that Contracting Parties shall:

pursue the measures appropriate for creating a national and cross-border network of protected areas, biotopes and other environmental assets protected or acknowledged as worthy of protection. They shall undertake to harmonise the objectives and measures with the cross-border protected areas.

The Alpine Conference is the political decision-making body of the Alpine Convention and consists of ministerial-level representatives of the Contracting Parties. The Multi-Annual Work Programme of the Alpine Conference has included among its priorities: "Further steps towards the cross-border networking of protected areas and cross-linking with other ecologically significant facilities" (Permanent Secretariat of the Alpine Convention, 2005, p. 11). By encouraging the creation of transboundary networks of protected areas, the Alpine Convention and its protocols promote the maintenance of large natural complexes across countries, which can contribute to ecological networks as core areas, buffer zones and corridors. (For further information, see the Alpine Convention website.)

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4.7 UNESCO Man and the Biosphere Programme

The Seville Strategy for Biosphere Reserves and Statutory Framework of the World Network of Biosphere Reserves, adopted by the UNESCO General Conference in 1995, identify a number of principles, recommended actions and indicators to use when implementing the biosphere reserves approach. Expressly recognizing TBPA, the Strategy calls for increased attention to regional approaches and new kinds of biosphere reserves, such as cluster and transboundary biosphere reserves.

66

Among its recommended actions, the Strategy encourages "the establishment of transboundary biosphere reserves as a means of dealing with the conservation of organisms, ecosystems, and genetic resources that cross national boundaries" (UNESCO, 1995, objective I.2, para. 1). It also urges the use of TBRs as an important tool for strengthening the worldwide network of biosphere reserves (UNESCO, 1995, objective IV.2, para. 6, 16).

67

In 2000, UNESCO adopted recommendations governing TBRs (UNESCO, 2000). Called the Pamplona Recommendations, after the city where they were adopted, the recommendations deal with establishing a TBR, measures that can be taken to ensure that a transboundary reserve is truly operational, and the process leading to official designation.

68

In this guidance, a TBR is defined as follows:

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A TBR is an official recognition at an international level and by a UN institution of a political will to co-operate in the conservation and sustainable use through common management of a shared ecosystem. It also represents a commitment of two or more countries to apply together the Seville Strategy for biosphere reserves and its objectives (UNESCO, 2000, p. 1).

The Pamplona Recommendations explain that the normal procedure to date has been to establish separate biosphere reserves in individual countries before designating them as TBRs. However, it is envisaged that in the future a TBR could be established jointly by the countries concerned in a single step. This will necessarily depend on the differences or similarities in the institutional and legal regimes of each participating country. In many cases, the differences may be substantial. Nevertheless, the long-term aim in such cases is to have one functional biosphere reserve (see UNESCO, 2000). For a list of UNESCO TBRs see Table IV-2.

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Table IV-2: UNESCO List of Transboundary Biosphere Reserves

Countries	TBR	Date of approval	Extension
Benin, Burkina Faso, Niger	'W' Region	2002	Région 'W' du Niger established 1996, extensions in Benin and Burkina Faso as a TBR in 2002
Czech Republic, Poland	Krkokonose/Karkonosze	1992	
France, Germany	Vosges du Nord/ Pfalzerwald	1998	Voges du Nord established in 1988 and Pfalzerwald in 1992
Mauritania, Senegal	Delta du Fleuve Senegal	2005	
Poland, Slovakia	Tatra	1992	
Poland, Slovakia, Ukraine	East Carpathians	1998	East Carpathian / East Beskid (Poland/ Slovakia) established 1992
Romania, Ukraine	Danube Delta	1998	Danube Delta (Romania) Established 1979, extended in 1992 Dunaisky (Ukraine), established 1998
Costa Rica, Panama	La Amistad	1982	Comprising Talamanca Range-La Amistad Reserves – La Amistad National Park (date of inscription 1983, extension 1990)
Morocco, Spain	Intercontinental Biosphere Reserve of the Mediterranean	2006	
Portugal, Spain	Gares-Xures	2009	
<i>Source: UNESCO, 2010a.</i>			

5 Special legal considerations for TBPAs

71 The law plays an important role in supporting the establishment and management of TBPAs and associated transboundary conservation initiatives. Different levels and types of law may be involved:

- **International law and policy:** including treaties and other legally binding international instruments, international customary law, and international or regional policy commitments.
- **Negotiated agreements:** negotiated agreements between countries at the bilateral or multilateral level, which are legally binding (including legally binding agreements between countries for a specific TBPA such as the Wadden Sea Trilateral Cooperation Agreement).
- **National policy, law and regulations:** provide the enabling legal framework for countries to participate in TBPAs and establish national components as part of the national protected areas system, but do not cover individual TBPA agreements or arrangements. At the transboundary level, different legal, administrative and judicial structures agreed by all participating states will be involved.
- **Sub-national law and regulations:** when conservation responsibilities are decentralized so that negotiations are undertaken by provinces or states, particularly in federal systems.
- **Local law or custom (traditional law):** when authority for protected areas has been devolved or transferred to a local level (for example, municipalities or villages) (GTPAN, 2007d).

The role of the legal drafter with respect to TBPAs may include the following tasks: 72

- (a) drafting sections of national protected areas legislation to incorporate provisions on TBPAs, in general or for specific cases;
- (b) preparing or assisting in the preparation of legal agreements recognizing joint establishment and management of a TBPA site, or the conservation components of a more generic agreement; this work would normally be done with oversight from the minister of foreign affairs or other appropriate minister handling foreign policy;
- (c) preparing or negotiating administrative documents for working-level transboundary cooperation generally or on specific subjects, and any special institutional relationships that may be important to include;
- (d) preparing or negotiating supplemental agreements to existing transboundary arrangements on specific management issues, for example, invasive alien species (IAS), emergency response, search and rescue, security, or transit privileges of border communities.

5.1 Domestic enabling framework

At the domestic level, protected areas legislation should provide a favourable enabling environment for TBPAs. Depending on the country's geographic and biodiversity features, there may be opportunities for TBPA arrangements in many different cross-border sites, both on land and sea. Within the context of domestic protected areas legislation, it is helpful for the legal drafter working with protected area authorities to take into account the larger context, but to leave specific details that will need to be addressed to the individual TBPA agreement or other arrangement for a specific site. 73

Protected areas legislation should provide that any agreement related to the development of a TBPA is consistent with the conservation objectives of the legislation and pursuant to good governance principles. In cases where a number of TBPAs already exist when protected areas legislation is enacted, it may be useful to reference existing TBPA agreements in a schedule, adding new TBPAs to the schedule as they are established. The legislation may also include a provision on the overarching objectives of TBPA cooperation, including references to the relevant international conventions or programmes such as the CMS, Ramsar Convention, UNESCO MAB Programme or European network obligations. 74

Most countries do not enact framework legislation solely for TBPAs. However, this may be an option where principal protected areas legislation does not already exist or is not suitable, or where the site has special features or needs that justify a separate domestic legal instrument. 75

In a federal state or in decentralized forms of government, principal legislation governing domestic protected areas may be at the sub-national level. In jurisdictions where TBPAs exist or may be established, it is important for such sub-national legislation to take into account possibilities for TBPAs, recognize the relevant national TBPA policy and principles, and provide an enabling environment for sub-national-level officials to be part of the process of negotiation and implementation where the TBPA arrangements affect their jurisdictions. 76

5.2 Drafting preparations for TBPA agreements

Legal and institutional approaches to transboundary conservation continue to evolve and advance. Because a particular TBPA arrangement will be driven by the specific conservation needs of the site as well as the legal and institutional systems of each partner, each agreement must be tailored to the individual TBPA. 77

- 78 When drafting or advising on a transboundary agreement, the legal drafter needs to take into account existing international instruments to which the countries are Parties as well as existing collaborations between the countries which may have a bearing on transboundary conservation arrangements. In addition, there are likely to be a host of non-conservation issues affecting the form and content of a particular transboundary conservation agreement, which the legal drafter will need to keep in mind. Such issues may relate to international relations, foreign affairs, immigration, trade, currency, defence and customs policies or arrangements between the countries.
- 79 Most importantly, the legal drafter needs to be familiar with existing conservation-related instruments or arrangements between the states involved. These instruments may directly facilitate TBPA negotiations and guide or determine the content of TBPA agreements.
- 80 Three main kinds of instruments and arrangements need attention. The first of these includes the international treaties and programmes to which the country has obligations or commitments that may relate to or be supportive of TBPA conservation, including the CBD, CMS, Ramsar Convention, UNCLOS, European regional networks, UNESCO MAB Programme, and regional programmes and protocols. For example, with respect to transboundary MPAs, there are several regional programmes and protocols under various Regional Seas programmes (see Part III, Chapter 2, section 3.3.1). States in some regions may already have adopted regional protocols specifically related to transboundary cooperation and resource management. For example, the Southern African Development Community (SADC) has adopted protocols dealing with such matters as transboundary forests and protected areas, shared watercourse systems, and fisheries. These agreements may have concepts and implementation techniques that could be useful as guidance for the legal drafter when developing new TBPA agreements. (For further information, see the SADC website.)
- 81 The second kind of instrument or arrangement to be familiar with is high-level bilateral agreements with neighbouring countries, of a general nature or in specific sectors, that are already in force and could be used to build new agreements supportive of TBPA arrangements. Such agreements may already have been concluded in such areas as tourism, cultural and educational exchanges, fisheries, environmental impact assessment (EIA), river basin management, or the shared management of other resources.
- 82 The third kind of instrument that may help inform and facilitate negotiations is existing transboundary cooperative arrangements that have been formalized (for example, through memoranda of understanding [MOUs] or other operational agreements) for specific cross-border issues associated with TBPAs, including scientific research collaboration, wildlife trade, security threats or emergencies.
- 83 The legal drafter will also want to be familiar with any other framework agreements of a more general nature currently in force or being negotiated between the countries, for example, related to economic development, or cultural and educational exchange. It may be possible to build upon supplemental agreements attached to general cooperative arrangements. Any such arrangements will help expedite the process of building cooperative agreements for a proposed TBPA.

5.3 Objectives of TBPA cooperation

- 84 Cooperation for TBPAs has a number of basic objectives of mutual benefit to the countries involved which, to the extent appropriate, could be incorporated in legal or other transnational documents. Often, an important overall objective is related to fulfilling obligations under an international convention, such as the Ramsar Convention or the World Heritage Convention, or under a regional agreement.
- 85 Examples of broad TBPA objectives include the following:

- (a) Support the long-term cooperative conservation of biological diversity and the sustainability of important biological resources, ecosystem services, and natural and cultural values across national borders;
- (b) Enhance transnational environmental protection and species conservation using an ecosystem approach to management;
- (c) Combat the introduction of IAS, and collaborate on prevention, control and containment of threats, including through information exchange on best practices and lessons learned;
- (d) Promote transnational landscape- and seascape-level ecosystem management through integrated land use and spatial planning, and integrated marine and coastal planning and management;
- (e) Support transboundary connectivity and resilience needs in the face of climate change pressures, and facilitate transboundary adaptive management for current and anticipated climate change impacts;
- (f) Promote the sustainable and equitable use of biological or other natural resources in and adjacent to the TBPA;
- (g) Facilitate efforts for the reintroduction or natural recolonization of large-range species into the TBPA;
- (h) Mitigate and prevent negative transboundary environmental effects;
- (i) Ensure the most efficient and effective cross-border surveillance, and control problems such as fire, pests, poaching and illegal trade in wildlife;
- (j) Share biodiversity and cultural resource management skills and experiences, including cooperative research, monitoring, data collection and information management;
- (k) Bring the economic benefits of conservation and sustainable use to local and national economies, and promote benefit sharing across boundaries with local communities and other local stakeholders;
- (l) Strive for a common or coordinated regime for bioprospecting in or near existing and proposed TBPAs;
- (m) Implement and advance obligations and objectives of international conventions or programmes to which the country is a Party (depending on the site, specific conventions or programmes may be identified);
- (n) Promote transboundary cooperation generally.

5.4 Levels and types of TBPA cooperation

A variety of approaches exist for TBPA cooperation. These range from informal arrangements involving some interaction at the working level, to integrated planning and formal arrangements at the policy level. Protected area managers may cooperate well at the technical level even when there is no formal cooperative arrangement between governments. However, adjacent or adjoining protected areas by themselves, without some cooperative arrangement, are normally not sufficient to qualify as a TBPA. IUCN guidelines offer a range of criteria to guide managers in determining the degree of progress towards full cooperation (see Table IV-3), and advise that the level of cooperation should reach at least Level 1 in order for internationally adjoining protected areas to be recognized as TBPAs (Sandwith et al., 2001, p. 33).

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The form that TBPA cooperative arrangements take, especially in the early phases, will depend to a large extent on existing legal and institutional frameworks in each participating state. Formal legal agreements may be more difficult to conclude where legal and institutional frameworks differ

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significantly. Different cultural perspectives or political systems, or differences in the treatment of customary rights and tenure, may also present special challenges to negotiating a formal arrangement. At the same time, there may be support at the local level, and at the technical and policy levels, to facilitate a formal agreement even where legal and institutional regimes are very different. Singly or in combination, the main options for developing an agreement include: (1) building on an existing formal agreement (bilateral or multilateral), commonly from provisions related to environmental cooperation; (2) negotiating a new formal agreement specifically for the transboundary arrangement; or (3) developing informal, written understandings for communication and cooperative tasks at the operational level.

Table IV-3: Levels of cooperation on TBPAs

Level of cooperation	Characteristics
Level 0 No cooperation	<ul style="list-style-type: none"> • Staff from two protected areas never communicate or meet • There is no sharing of information or cooperation on any specific issues
Level 1 Communication	<ul style="list-style-type: none"> • There is some two-way communication between the protected areas • Meetings or communication takes place at least once a year • Information is sometimes shared • Notification of actions which may affect the other protected area will sometimes take place
Level 2 Consultation	<ul style="list-style-type: none"> • Communication is more frequent (at least three times a year) • Cooperation occurs on at least two different activities • The two sides usually share information • Notification of actions affecting the adjoining protected area usually occurs
Level 3 Collaboration	<ul style="list-style-type: none"> • Communication is frequent (at least every two months) • Meetings occur at least three times a year • The two protected areas actively cooperate on at least four activities, sometimes coordinating their planning and consulting with the other protected area before taking action
Level 4 Coordination of planning	<ul style="list-style-type: none"> • The two protected areas communicate often and coordinate actions in some areas, especially planning • The two protected areas work together on at least five activities, holding regular meetings and notifying each other in case of an emergency • Protected areas usually coordinate their planning, often treating the whole area as a single ecological unit
Level 5 Full cooperation	<ul style="list-style-type: none"> • Planning for the two protected areas is fully integrated and, if appropriate, ecosystem-based, with implied joint decision making and common goals • Joint planning occurs and, if the two share an ecosystem, this planning usually treats the two protected areas as a whole • Joint management sometimes occurs, with cooperation on at least six activities • A joint committee exists for advising on transboundary cooperation
<p><i>Source: Sandwith et al., 2001, p. 34.</i></p>	

88 Formal agreements. Formal agreements are legally binding instruments that normally represent high-level commitment and help provide certainty for the long term. They may relate to existing TBPAs governed by informal arrangements or proposed TBPAs. They may begin with technical negotiations at the working level to identify issues and options, and then move to high policy-level involvement for conclusion of the agreement. Because of this high-level involvement and the different state systems and institutions involved, these agreements may require a lengthy negotiation process. Where a formal

transboundary agreement is being negotiated between countries, the foreign affairs ministry, rather than the protected areas authority, will normally have a lead role. Nevertheless, good practice dictates having the protected areas authority serve as advisor on the conservation aspects of the agreement. Where a transboundary arrangement is raised to the level of a formal bilateral or multilateral agreement, the minister responsible and the cabinet will normally be involved and, subject to legal practice, the legislature may have a role, either to give formal consent or to indicate no objection.

In many instances, a general cooperation agreement is already in place between the countries concerned, which may be the basis for developing a formal supplemental agreement specifically on a TBPA. This may be particularly appropriate where the general agreement contains an environmental or protected areas clause. Under such circumstances, an efficient way to proceed could be to negotiate a supplemental agreement specifically for the envisioned TBPA.

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Frequently, when a separate formal agreement is negotiated for a specific TBPA, it takes the form of a framework agreement for the site, and then provides for additional working arrangements to be developed for specific issues. The framework agreement will normally identify the main objectives, commitments and decision-making mechanisms for the TBPA with the understanding that more detailed plans, projects and actions will be developed by each participating state in order to fulfil the overall objectives and commitments made. A framework approach is particularly appropriate where large expanses of diverse areas are involved and there are many stakeholders and management regimes. This is the case, for instance, where transboundary cooperation involves large marine ecosystems (LMEs), and where coordinated action may be needed for thousands of kilometres of both land and sea areas to effectively address threats and manage the area for conservation. An example of a formal transnational arrangement for an LME is the MOU signed by Indonesia, Malaysia and the Philippines in 2004 for management and conservation of the 900,000 sq km Sulu-Sulawesi Marine Ecoregion (see Box IV-4).

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Less formal arrangements. While formal arrangements provide high-level commitment and certainty, the negotiation process may be so difficult and complicated that it puts the conservation values of the site at risk in the interim. Because of these difficulties, many existing TBPAs are based on less formal arrangements.

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A variety of cooperative arrangements may be possible to initiate as a first step towards building relationships and collaboration on a TBPA. These arrangements could be in the form of a simple exchange of letters between protected area authorities for general or specific purposes. Specific purposes may include such matters as harmonizing management, contingency plans to jointly address IAS and emergencies, fire and pest control, search and rescue operations, or protocols for information exchange and consultation. Protected area authorities could also build on existing cross-border relationships developed by the private sector or NGOs, particularly where those entities have working relationships with community, economic or conservation interests in protected areas.

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Working-level arrangements have the advantage of providing flexibility and generally requiring less negotiating time for their development. They can begin with issues where there is clear mutual interest and easy agreement for immediate application, such as sharing information and communications, or co-sponsoring an annual workshop on respective management plans. Informal arrangements provide a basis on which to negotiate issues that may be more difficult to resolve. The disadvantage of this approach, standing alone, is that its flexibility and limited nature also mean that it may not be possible to address some problems through such arrangements, or that commitments made may be easily weakened or dissolved. Informal arrangements provide less certainty and security for the future.

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Box IV-4: Trilateral MOU for the Sulu-Sulawesi Marine Ecoregion

The Sulu and Sulawesi marine ecoregion ranks among the most biologically diverse and productive marine systems in the world. It is located within the national jurisdictions of three populous nations, the Philippines (with roughly 70 per cent of the ecoregion), Indonesia (20 per cent), and Malaysia (10 per cent) (see Figure A). The ecoregion contains more than 100 terrestrial protected areas and 200 MPAs, many with coral reefs. In the late 1990s, the three countries began work on a conservation programme for the region, with technical assistance from the World Wide Fund for Nature. In 2001, the three countries developed a common 50-year vision for biodiversity and sustainable productivity in this LME, which came to be called the Sulu-Sulawesi Marine Ecoregion (SSME). The output of collective work to implement this vision was a stakeholder's Ecoregion Conservation Plan (ECP) which was formally adopted through an MOU signed by the three countries in February 2004. The ECP incorporates the national plans of the three countries as well as an ecoregion action plan for joint implementation. The MOU contains 13 articles, of which key provisions are noted below:

Memorandum of Understanding between the Government of the Republic of Indonesia and the Government of Malaysia and the Government of the Republic of the Philippines on the adoption of the Conservation Plan for the Sulu-Sulawesi Marine Ecoregion (13 February 2004)

Preamble

RECOGNISING that [...] the ecoregion approach to conservation facilitates the realization of the four fundamental goals of biodiversity conservation, which are representation, sustainability of ecological processes, viability of species, and resiliency. [...]

Article I - Definition

"Ecoregion Conservation Plan (ECP)" means a plan of action that spells out the short-term (10-15 years) goals and actions to be taken as steps in realising the Biodiversity Vision, which is the long term (50 years) goal. The ECP includes the ecoregional action plan and the national action plans of Indonesia, Malaysia and the Philippines, that are consistent with and are aligned to national plans and programmes as well as each country's international agreements and commitments [...]

Article II - Ecoregion Conservation Plan (ECP)

The Parties, subject to the terms of this Memorandum of Understanding and the laws, national policies, rules and regulations of each country, shall undertake necessary measures to formally adopt the ECP and its incorporation into their respective National Plans.

Article III - Areas of Co-operation

1. The Parties shall, subject to their respective national policies, laws, rules and regulations from time to time in force governing the subject matter in their respective countries, endeavour to take necessary steps to encourage, facilitate and promote co-operation in the areas identified in the ECP which are as follows:

- a. establishment of management strategies and co-ordinated institutions for effective ecoregion conservation;
- b. establishment of a functional integrated network of priority conservation areas to ensure ecological integrity;
- c. development of sustainable livelihood systems that support marine and coastal conservation across the ecoregion;
- d. shaping of economic development compatible with biodiversity conservation;
- e. enhancement of understanding of biodiversity resources and factors affecting them to form basis for management decisions;
- f. development of communication, education and outreach programmes and strategies to motivate people to take conservation action;
- g. development of sustainable financing mechanism to support cost of conservation and resource management;
- h. building and enhancement of capacity of stakeholders to effectively manage the conservation of SSME;
- i. implementation of coordinated protection of threatened marine species to ensure maintenance of viable populations and protection of critical habitat; and
- j. improvement of coastal, oceanic and other types of fisheries resource condition and management by developing a framework strategy, institutions and appropriate interventions.

The MOU calls for each Party to designate a National Focal Authority (Art. IV), and for the establishment of a Tri-National Committee of representatives from the designated national authorities to implement the MOU (Art. V). The lead representatives to the Tri-National Committee are: for Indonesia, the Ministry of Marine Affairs and Fisheries; for Malaysia, the Ministry of Agriculture and Food Industries; and for the Philippines, the Department of Environment and Natural Resources.

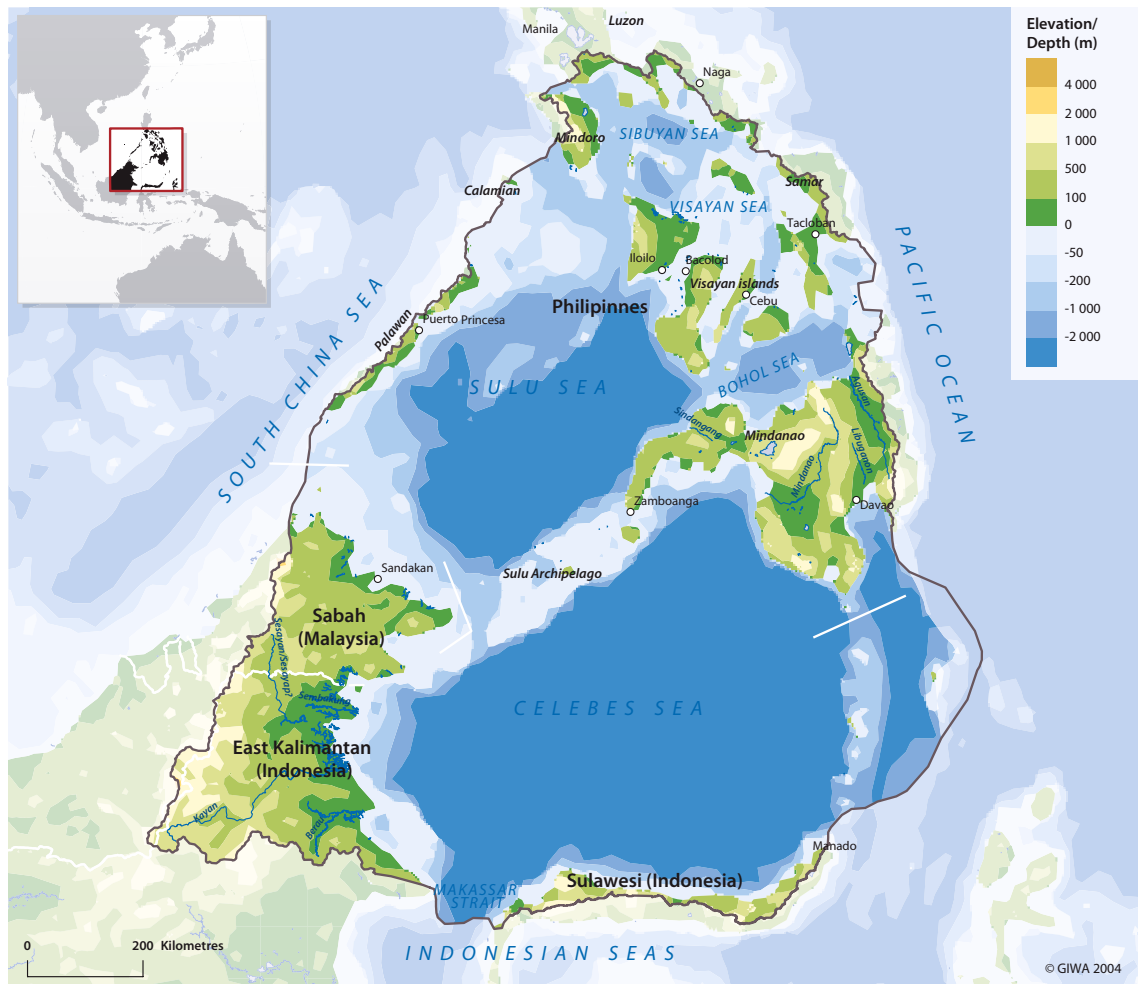


Implementation. Three subcommittees have been formed which are overseen by the Tri-National Committee. These subcommittees are: (1) Marine Protected Areas Networks (MPAN) Subcommittee, chaired by the Philippines; (2) Migratory and Charismatic Species Subcommittee, chaired by Malaysia; and (3) Sustainable Fisheries Subcommittee, chaired by Indonesia. A comprehensive action plan for each of the subcommittees has been prepared, to be launched in 2010.

With the MOU framework in place, countries have been able to generate support from development partners, including the Asian Development Bank and the United Nations Development Programme, to fund the work of the subcommittees with implementation of the SSME Conservation Plan. Implementation support also comes from the local offices of international NGOs such as the World Wide Fund for Nature and Conservation International. The SSME is in the Global Environment Facility-International Waters (GEF-IW) portfolio.

For the full text of the MOU, see *Tropical Coasts*, 2008, pp. 34–37. For further information, see the SSME website.

Figure A: Location and Global International Waters Assessment (GIWA) boundaries of the Sulu-Sulawesi (Celebes) Sea and adjacent GIWA subregions



Source: DeVantier et al., 2004, p. 88.

Working-level arrangements may eventually be transformed or supported by more formal arrangements. As explained by the Transboundary Protected Area Task Force:

94

Co-operation can evolve as the collaboration's effectiveness is seen, and adjustments can easily be made if some aspect isn't working. [...] In time, the parties may be ready to negotiate a more formal instrument, but this process will hopefully by then be easier and less costly because they will, through working together, have developed a real consensus. The ultimate agreement may be broader, more binding, and less likely to need further revision (GTPAN, 2007d).

- 95 It is important to stress that there will be occasions when a less formal arrangement will have a greater chance of succeeding in the foreseeable future. As such, it may serve as a transitional stage towards a more formal agreement later, once relationships are established and the arrangement demonstrates value on the ground.
- 96 Regardless of the formality of transboundary cooperative arrangements, there should be an expectation for periodic review and updating to respond to changing conditions and needs. These include responding to climate change as scientific understanding continues to improve on potential impacts and adaptation measures.

5.5 Options for TBPA institutional mechanisms

- 97 TBPA arrangements should include some form of institutional mechanism for cooperation, whether formal or informal. Depending on the formality of the arrangement and the level of cooperation, institutional mechanisms may include several components, from a high-level policy body for centralized decision making to technical committees, advisory bodies, department focal points and sub-national authorities.
- 98 Institutional mechanisms for TBPA cooperation should be clearly described in the appropriate documents related to the cooperation arrangement. Possible mechanisms for TBPA cooperation include the following:
- (a) In a formal agreement, a coordinating mechanism would normally be identified. It could be designated especially for the TBPA, or could be an existing body assigned with this task. The coordinating mechanism should be comprised of representatives or focal points from key sectors and levels of government, including the lead protected areas authority, the NGO sector, and representatives of indigenous peoples and local communities where they manage, use or reside in the site.
 - (b) A single joint secretariat or similar body could be created to oversee and monitor implementation of the cooperative arrangement. This is a recommendation under the World Heritage Convention Operational Guidelines (UNESCO, 2008b, para. 135), and is illustrated by the Wadden Sea Trilateral Cooperation Arrangement (see Box IV-3).
 - (c) One or more focal points from the protected areas authority in each country, and other entities as relevant, responsible for overseeing implementation of the agreed actions for the protected area in their jurisdiction and any joint activities, with the role also to be the lead communicators with counterparts in the other country or countries.
 - (d) Joint technical working groups, formally established or administratively agreed, to study, monitor and advise on common issues, with participants including representatives from affected communities, the NGO sector, universities and others with technical expertise, as relevant.
 - (e) At the staff level, communication channels for the exchange of information and expertise could be developed, especially where expertise may be uneven, and joint work teams could be established for specific tasks.
 - (f) Transboundary advisory bodies could be established for the TBPA to include representatives from stakeholder groups including local communities, indigenous peoples, NGOs, scientific institutions, the private sector and others with interest or expertise, as appropriate. The constitution of an advisory scientific committee should also be considered.
 - (g) Within each jurisdiction, consultative mechanisms across government levels and sectors to address problems that may arise from time to time over conflicting mandates or activities, and generally to help remove barriers to implementation. Procedures should be set up to keep officials in foreign

affairs, security and other appropriate agencies informed about progress being made with the TBPA cooperation arrangements, particularly since it may be difficult to undertake certain actions and fulfil commitments without their support.

5.6 TBPA-related coordination functions

Planning. Where protected areas are being proposed for establishment and may become part of a TBPA, early and regular communication between the neighbouring countries is advisable. Each country will undertake the necessary measures, according to domestic legislation, to establish its protected area, while keeping in mind the possibility that the site could become part of a TBPA. Under these circumstances, early cross-border communication provides an opportunity for the countries involved to exchange information so that their domestic provisions about conservation objectives, zones and protected area categories may be sufficiently compatible to facilitate creating the TBPA. It is also important that communities and stakeholders on each side of the border receive information and have the opportunity to participate in the process of protected areas development on an equitable basis and within a meaningful time frame.

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Management, monitoring and evaluation. Several aspects of TBPA cooperation are particularly appropriate for early discussions between participating countries. These relate to cooperative management, monitoring and evaluation activities associated with TBPAs. Ideally, such aspects should be recorded in writing, and should include the following:

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- (a) Collaborate on identifying the overall conservation objectives and management category for the TBPA;
- (b) Share management plans and harmonize border operations with compatible management objectives;
- (c) Where feasible, develop a joint master plan for the TBPA, incorporating the management plans of each constituent part;
- (d) Cooperate on the preparation and adoption of an overall zoning plan for the TBPA;
- (e) Work cooperatively to monitor and periodically update the joint master plan and zoning plan to ensure preservation of the overall conservation objectives of the TBPA, and adapt management of constituent parts as needed to ensure continued protection of the most valuable biodiversity sites as core zones with compatible activities surrounding the core areas;
- (f) Cooperate to harmonize visitor access and movement, immigration and emigration, customs and excise controls, emergency plans, and health and safety rules in the constituent parts of the TBPA;
- (g) Demarcate buffer zones surrounding the designated TBPA with agreed boundaries and compatible land or sea uses, and transition zones (such as required by the biosphere reserves programme);
- (h) Cooperate on developing and implementing a joint monitoring and evaluation work plan, or cooperate on individual monitoring and evaluation plans, to assess management effectiveness;
- (i) Cooperate in removing barriers to the free movement of wildlife across the border;
- (j) Cooperate on identifying and monitoring ecological corridors and other connectivity conservation areas that may be important for the TBPA;
- (k) Publish a joint map of the final boundaries, zones and other major features, and distribute to local communities and other stakeholders and interested parties;
- (l) Establish a system for communication, information exchange and data collection between protected area authorities for normal operations, for use of the areas for tourism and other purposes, and for emergencies.

(m) Coordinate and collaborate on scientific research in the TBPA regarding such issues as biodiversity analysis and changes, bioprospecting, control of threats such as IAS, changing conditions due to climate change and associated adaptation options, and connectivity conservation needs.

- 101 **Controlling threats of wildlife disease and invasive alien species.** One of the major areas for cooperation is the prevention and control of invasions of alien plants and animals into the TBPA. In addition, especially in large areas where the movement of indigenous peoples and local communities (with their domestic animals) may be permitted, the transmission of domestic animal diseases to wildlife populations may be a significant threat. The introduction of other invasive alien pathogens into parts of the TBPA may also occur. With climate change, wildlife populations may shift ranges and translocate, threatening the genetic contamination of local populations. These threats call for cooperative and coordinated measures, including the development of early warning systems; early consultation on potential problems; compatible management activities and measures to control and eliminate alien species; compatible measures to control the transmission of diseases and alien species across the border by foot, vehicle or boat; and measures to control the translocation of wildlife as much as possible where effects are likely to be negative on local populations (Braack et al., 2006, pp. 15–16).
- 102 **Involving border communities and stakeholders.** Cooperative arrangements are needed to ensure that border communities are involved and participate as essential stakeholders when affected by a TBPA. These arrangements should also ensure that the communities do not have undue burdens or costs associated with the TBPA placed upon them, are spared extra burdens as much as possible, and are among the main stakeholder groups to participate in benefits that may flow from the TBPA. Communities may exist in the TBPA that have been separated or have otherwise suffered as a result of political borders being created. The TBPA should be viewed as an opportunity to bring such communities together in cooperative activities related to the TBPA.
- 103 Opportunities for sharing economic benefits from the TBPA through such means as employment and the provision of services, and possible co-management agreements, are all applicable here. Cooperation arrangements should allow for resource management agreements, contractual arrangements and other collaborative management activities with local communities, including indigenous peoples and local governing bodies. These communities may possess traditional or local knowledge important for management. They may offer expertise with respect to needed management tasks. Special security arrangements and provisions for the cross-border movement of members of local communities may also need attention. Some border areas may pose security threats (for example, where certain cross-border routes are used for the black market trade in wildlife or other criminal activity). Security issues of this nature would need to be addressed as part of the cooperation arrangement with such actions as dedicating special resources for enforcement. Cooperative arrangements should recognize indigenous and local community rights to travel across borders.
- 104 Mobile indigenous peoples may have traditionally been using a cross-border area that is subsequently designated as a TBPA. Special cooperation arrangements should continue to recognize and ensure their traditional practices, consistent with the conservation objectives of the site.
- 105 In some cases, corporations, NGOs, private-sector groups or private parties may own or control property important for inclusion in a TBPA. In many cases, such entities will have expertise useful for the TBPA. Cooperation arrangements should promote their participation, as relevant.
- 106 **Environmental and social impact assessment.** Cooperative arrangements between TBPA countries should provide safeguards so that transboundary harm is avoided by any of the participating countries. This is a general obligation under international law and reflected in the CBD, which provides that

Parties have the “responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction” (Art. 3).

A responsive and widely used tool for this purpose is the EIA process which normally includes social impact analysis. Cooperative TBPA arrangements should include a commitment by each country to undertake an EIA whenever it proposes a border activity that may cause transboundary environmental damage. The EIA process would normally require that the potentially affected country is informed in advance, with the opportunity for consultations, and that design and mitigation measures are pursued to avoid transboundary harm. Where a formal TBPA agreement exists, it is advisable to include a requirement that an EIA should be undertaken for any proposed activity that may cause significant environmental effects on the TBPA. That provision also could state that any such assessment would be shared with the other parties and institutions that are part of the TBPA cooperation, and that all possible efforts will be made to avoid significant negative effects or, if that is not possible, to cancel the project.

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Negotiations could identify the major types of activities that would warrant an automatic EIA, and these could be enumerated in writing. Where feasible, there could also be agreement to initiate an EIA of other activities not on the list when one of the parties to the cooperative arrangement so requests. Where less formal TBPA arrangements exist, all participating states should also agree, to the extent feasible, to use EIA tools for an activity undertaken by one state that may negatively impact any part of the TBPA, and to share the resulting environmental findings with the other participating states.

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Emergencies and disasters. Emergencies and disasters in TBPAs will require clear and well-established cooperative arrangements that outline the roles and responsibilities of the appropriate entities in participating countries. This is particularly important in TBPAs where dispersed responsibilities may exist. Emergencies arising on one side of the border may cause cross-border environmental damage if not handled effectively, efficiently and with targeted cooperative arrangements. In some cases, an emergency may affect several different parts of the TBPA. Emergencies could arise from unmanaged fires, oil spills or other pollution events, the sudden occurrence of a pest outbreak or invasive species, or natural disasters such as extreme weather events, flooding, storm surges, earthquakes or volcanic action. For emergency situations, cooperative arrangements could include an agreed requirement for the preparation of joint contingency plans tailored to the main emergencies likely to occur, along with procedures for communications, location and use of special equipment, and identification and mobilization of special services as needed (for example, firefighters, police, pollution specialists) for a joint or coordinated response.

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Collaborative compliance, enforcement and surveillance. Participating countries should also take all measures possible to coordinate and cooperate on compliance, enforcement and surveillance within the TBPA and in its constituent parts. This cooperation is fundamental to ensure the integrity of the TBPA overall. Collaboration and, in special circumstance, joint enforcement action are also important to help share the costs of staff and equipment, particularly in large TBPAs where enforcement costs may severely limit capacity for on-the-ground surveillance.

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Transboundary cooperative arrangements could include provisions for joint enforcement, surveillance and training. Cooperative arrangements for compliance, enforcement and surveillance could also enlist the assistance of traditional enforcement agencies such as the police, coast guard and customs, as well as community enforcement officers from indigenous and local communities.

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Subject to local legal and judicial rules, countries should endeavour to harmonize penalties for specific illegal activities. Moreover, penalties should be sufficiently severe and of comparable scale to serve as

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a deterrent throughout the TBPA. The TBPA countries should cooperate in facilitating the extradition of persons charged with offences. Penalties should also include recovery of costs for the restoration and rehabilitation of areas of the TBPA that may have been degraded or destroyed by illegal activity.

- 113 **Scientific research and data sharing.** Joint scientific research projects or cooperation on mutual access for research teams is also an important consideration. These arrangements could include activities such as data collection and analysis, information exchange, shared field research, and field training to strengthen staff capacity. Cooperative arrangements could also be made to harmonize rules and conditions of access, permits, fees, reporting requirements, and conditions for collecting and sharing specimens.
- 114 **Negotiation and dispute resolution.** Transboundary arrangements should promote cooperative measures intended to avoid disputes and facilitate compliance. Situations may arise, however, where conflicts or emergencies develop that are outside the control of the respective protected area authorities and the coordinating mechanism. In addition, there may be occasions where disputes arise over interpretation of a particular provision in the transboundary cooperative arrangement.
- 115 To address this problem, it is common to include in the agreement a provision calling for transparent mediation or other dispute resolution mechanisms with the assistance of neutral intermediaries to settle conflicts that cannot be settled through negotiation. Where mediation fails, a provision might allow for the appointment of a special panel comprised of one or more representatives of equal rank from each jurisdiction.
- 116 In the case of a TBPA that is also an internationally recognized site, if other means of conflict resolution are unsuccessful, countries may seek help from the good offices of the international organizations involved. These organizations, as neutral third parties, may be able to undertake fact-finding missions and provide technical or other assistance, helping to negotiate a successful end to the conflict.

6 Harmonization of actions

- 117 A key goal for TBPA arrangements is to harmonize rules and operations across components of the TBPA to the extent possible. Each partner is a sovereign state with distinct legal systems and cultural traditions. Nevertheless, at the working level, operations can usually be flexibly designed with formal and informal procedures to ensure maximum compatibility for management, monitoring and enforcement on each side of the border. Where possible, the formal legal agreement concluded at the policy level could include a commitment to harmonize regulations for the TBPA, based on agreed principles for managing visitors, prohibited and permitted activities, research, monitoring, and enforcement. The goal should be to remove legal and institutional barriers that might jeopardize effective joint implementation, and to promote whatever tools and mechanisms might be mutually agreed to advance cooperative management of the TBPA for sustainability and effectiveness over the long term.

References

- African Development Bank (AfDB). 2008. Governance Strategic Directions and Action Plan: GAP 2008–2012. Governance, Economic and Financial Management Department. Tunis Belvédère: AfDB. Available at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/7000017_EN_OSSE%20anglais%20OK.pdf.
- . 2010. Frequently asked questions. What is governance? Online, <http://www.afdb.org/en/topics-sectors/sectors/economic-financial-governance/frequently-asked-questions>.
- Alldrich, R., and J. Wyerman. 2006. 2005 National Land Trust Census Report. Washington, DC: Land Trust Alliance. Available at <http://www.landtrustalliance.org/about-us/land-trust-census/2005-report.pdf>.
- Arctic Council. 2009. Arctic Marine Shipping Assessment 2009 Report. Available at http://www.pame.is/images/stories/PDF_Files/AMSA_2009_Report_2nd_print.pdf.
- Asian Development Bank (ADB). 1999. Governance: Sound Development Management. Manila: ADB. Available at <http://www.adb.org/documents/policies/governance/govpolicy.pdf>.
- Bakarr, M., and M. Lockwood. Establishing Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.
- Barber, C.V., K.R. Miller and M. Boness (eds.). 2004. Securing Protected Areas in the Face of Global Change: Issues and Strategies. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2004-072.pdf>.
- Belfiore, S., B. Cicin-Sain and C. Ehler (eds.). 2004. Incorporating Marine Protected Areas into Integrated Coastal and Ocean Management: Principles and Guidelines. Gland and Cambridge: IUCN. Available at http://www.iucn.fr/IMG/pdf/Incorporating_Marine_Protected_Areas_into_Integrated_Ocean_and_Coastal_Management-Principles_and_Guidelines.pdf.
- Benidickson, J. 2010a. Legal Framework for Protected Areas: Canada. Gland, Switzerland: IUCN.
- . 2010b. Legal Framework for Protected Areas: Ontario (Canada). Gland, Switzerland: IUCN.
- Bernstein, J., and B.A. Mitchell. 2005. Land Trusts, Private Reserves and Conservation Easements in the United States. *Parks* 15(2): 48–60. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Bishop, K., N. Dudley, A. Phillips and S. Stolton. 2004. Speaking a Common Language: The Uses and Performance of the IUCN System of Management Categories for Protected Areas. Cardiff: Cardiff University, IUCN and UNEP-WCMC. Available at <http://data.iucn.org/dbtw-wpd/edocs/2004-049.pdf>.
- Boer, B., and S. Gruber. 2010a. Legal Framework for Protected Areas: Australia. Gland, Switzerland: IUCN.
- . 2010b. Legal Framework for Protected Areas: New South Wales (Australia). Gland, Switzerland: IUCN.
- Boitani, L., and C. Rondinini. 2008. From Management Objectives to Biodiversity Objectives. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Bonnin, M., A. Bruszik, B. Delbaere, H. Lethier, D. Richard, S. Rientjes, G. van Uden and A. Terry. 2007. The Pan-European Ecological Network: Taking Stock. Nature and Environment No. 146. Belgium: Council of Europe.
- Borrini-Feyerabend, G. 1996. Collaborative Management of Protected Areas: Tailoring the Approach to the Context. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/1996-032.pdf>.
- . 2004. Governance of Protected Areas, Participation and Equity. In Secretariat of the Convention on Biological Diversity (SCBD). *Biodiversity issues for consideration in the planning, establishment and management of protected area sites and networks*. CBD Technical Series No. 15. Montreal: SCBD. Available at <http://www.cbd.int/doc/publications/cbd-ts-15.pdf>.
- Borrini-Feyerabend, G., A. Kothari and G. Oviedo. 2004. Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation. WCPA Best Practice Protected Area Guidelines Series No. 11. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-011.pdf>.
- Borrini-Feyerabend, G., J. Johnston and D. Pansky. 2006. Governance of Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.
- Borrini-Feyerabend, G., M. Pimbert, M.T. Farvar, A. Kothari, and Y. Renard. 2007. *Sharing Power: A Global Guide to Collaborative Management of Natural Resources*. London: Earthscan.
- Braack, L., T. Sandwith, D. Peddle and T. Petermann. 2006. Security Considerations in the Planning and Management of Transboundary Conservation Areas. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2006-056.pdf>.
- Carroll, N., J. Fox and R. Bayon (eds.). 2007. Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems. London: Earthscan.
- Central American Commission on Environment and Development (CCAD). 2008. Regional Policy on Private Protected Areas. Adopted at the XLIII Ordinary Meeting of the Council of Ministers of the CCAD, San Salvador, 25 January 2008.

- Chacon, C.M. 2005. Fostering Conservation of Key Priority Sites and Rural Development in Central America: The Role of Private Protected Areas. *Parks* (15)2: 39–47. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Commission of the European Communities. 2001. European Governance. A White Paper. COM(2001) 428. Brussels. Available at http://eur-lex.europa.eu/LexUriServ/site/en/com/2001/com2001_0428en01.pdf.
- . 2003. Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee: Governance and Development. COM(2003) 615. Brussels. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0615:FIN:EN:PDF>.
- Common Wadden Sea Secretariat. 2010. Wadden Sea Plan 2010. Available at <http://www.waddensea-secretariat.org/tgc/DocumentsSylt2010/WSP2010%20Final.pdf>.
- Commonwealth of Australia. 2009. Management of Great Australian Bight Marine Park (Commonwealth Waters). Department of the Environment, Water, Heritage and the Arts. Online, <http://www.environment.gov.au/coasts/mpa/gab/management.html>.
- Cooney, R. 2004. The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An Issues Paper for Policy-Makers, Researchers and Practitioners. IUCN Policy and Global Change Series No. 2. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PGC-002.pdf>.
- Council of the European Union. 2003. Draft Council Conclusions on Governance in the Context of Development Cooperation. 14773/03 DEVGEN 144. Brussels. Available at <http://register.consilium.europa.eu/pdf/en/03/st14/st14773.en03.pdf>.
- Davey, A.G. 1998. National System Planning for Protected Areas. WCPA Best Practice Protected Area Guidelines Series No. 1. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-001.pdf>.
- Day, J. 2006. Marine Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.
- De Poorter, M. 2007. Invasive Alien Species and Protected Areas: A Scoping Report. Part I: Scoping the Scale and Nature of Invasive Alien Species Threats to Protected Areas, Impediments to IAS Management and Means to Address those Impediments. Available at http://www.gisp.org/publications/reports/IAS_ProtectedAreas_Scoping_I.pdf.
- DeVantier, L., A. Alcala and C. Wilkinson. 2004. The Sulu-Sulawesi Sea: Environmental and Socioeconomic Status, Future Prognosis and Ameliorative Policy Options. *Ambio* 33(1–2): 88–97. Available at http://www.unep.org/dewa/giwa/publications/articles/ambio/article_11.pdf.
- Dillon, B. 2004. The Use of the Categories in National and International Legislation and Policy. *Parks* 14(3): 15–22. Available at http://cmsdata.iucn.org/downloads/14_3lowres.pdf.
- Dudley, N. (ed.). 2008. *Guidelines for Applying Protected Area Management Categories*. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAPS-016.pdf>.
- Dudley, N., K.J. Mulongoy, S. Cohen, S. Stolton, C.V. Barber and S.B. Gidda. 2005. Towards Effective Protected Area Systems: An Action Guide to Implement the Convention on Biological Diversity Programme of Work on Protected Areas. CBD Technical Series No. 18. Montreal: Secretariat of the Convention on Biological Diversity (SCBD). Available at <http://www.cbd.int/doc/publications/cbd-ts-18.pdf>.
- Dudley, N., and A. Phillips. 2006. Forests and Protected Areas: Guidance on the Use of the IUCN Protected Area Management Categories. WCPA Best Practice Protected Area Guidelines Series No. 12. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-012.pdf>.
- Dudley, N., and S. Stolton (eds.). 2008. *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Dudley, N., S. Stolton, A. Belokurov, L. Krueger, N. Lopoukhine, K. MacKinnon, T. Sandwith and N. Sekhran (eds.). 2010. Natural Solutions: Protected Areas Helping People Cope with Climate Change. Gland, Washington, DC and New York: IUCN-WCPA, TNC, UNDP, WCS, The World Bank and WWF. Available at http://cmsdata.iucn.org/downloads/natural_solutions.pdf.
- Eagles, P., S. McCool and C. Haynes. 2002. Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. WCPA Best Practice Protected Area Guidelines Series No. 8. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-008.pdf>.
- EECONET Action Fund (EAF). (Undated.) The ecological network concept. Online, <http://www.eeconet.org/eeconet/index.html>.
- Ehler, C., and F. Douvère. 2009. Marine Spatial Planning: A Step-By-Step Approach Toward Ecosystem-Based Management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO. Available at <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/d87c0c421da4593fd93bbee1898e1d51.pdf>.
- Emerton, L., J. Bishop and L. Thomas. 2006. Sustainable Financing of Protected Areas: A Global Review of Challenges and Options. WCPA Best Practice Protected Area Guidelines Series No. 13. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-013.pdf>.
- Environmental Law Institute (ELI). 2003. *Legal Tools and Incentives for Private Lands Conservation in Latin America: Building Models for Success*. Washington, DC: ELI. Available at <http://elistorge.org/Data/products/d13-10a.pdf>.

- European Commission. 2007. Guidelines for the Establishment of the Natura 2000 Network in the Marine Environment. Application of the Habitats and Birds Directives. Available at http://ec.europa.eu/environment/nature/natura2000/marine/docs/marine_guidelines.pdf.
- Farrier, D., and M. Adams. 2010. Indigenous/government co-management of protected areas: Booderee National Park and the National Framework in Australia. Gland, Switzerland: IUCN.
- Figgis, P. 2004. Conservation on Private Lands: the Australian Experience. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAPS-013.pdf>.
- Figgis, P., D. Humann and M. Looker. 2005. Conservation on Private Land in Australia. *Parks* 15(2): 19–29. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Food and Agriculture Organization of the United Nations (FAO). 1995. Code of Conduct for Responsible Fisheries. Rome: FAO. Available at <ftp://ftp.fao.org/docrep/fao/005/v9878e/v9878e00.pdf>.
- . 2007. Report and documentation of the Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations. Rome, 12–14 June 2006. FAO Fisheries Report. No. 825. Rome: FAO. Available at <http://www.fao.org/docrep/010/a1061e/a1061e00.htm>.
- Galvin, M., and T. Haller (eds.). 2008. *People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern. Vol. 3. Bern: Geographica Bernensia. Available at http://www.nccr-north-south.unibe.ch/publications/Infosystem/On-line%20Dokumente/Upload/Galvin_Haller_NCCR_People_Protected_Areas_2008.pdf.
- Gjerde, K. et al. 2008a. *Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction*. IUCN Marine Law and Policy Paper No. 2. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-2.pdf>.
- . 2008b. Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction. IUCN Environmental Policy and Law Papers, Marine Series No. 1. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-1.pdf>.
- Global Transboundary Protected Areas Network (GTPAN). 2007a. A New Initiative of the Transboundary Protected Areas Task Force. Online, http://www.tbpa.net/issues_02.htm.
- . 2007b. A Typology of Transboundary Protected Areas: Different Approaches for Different Needs. Online, http://www.tbpa.net/issues_04.htm.
- . 2007c. UNEP-WCMC Transboundary Protected Areas Inventory - 2007. Online, http://www.tbpa.net/tpa_inventory.html.
- . 2007d. Using the Law to Help Transboundary Conservation. Online, http://www.tbpa.net/issues_01.htm.
- Godoy Herrera, J.C. 2003. Mesoamerican Biological Corridor: Regional Initiative for the Promotion of Forest Conservation. Paper for the XII World Forestry Congress, Québec, Canada, 21 to 28 September 2003. Rome: FAO. Available at <http://www.fao.org/DOCREP/ARTICLE/WFC/XII/MS15-E.HTM>.
- Govan, H., W. Aalbersberg, A. Tawake and J. Parks. 2008. Locally-Managed Marine Areas: A Guide for Practitioners. Locally-Managed Marine Area Network. Available at <http://lmmnetwork.org/>.
- Govan, H., A. Tawake, K. Tabunakawai, A. Jenkins, A. Lasgorceix, E. Techera, H. Tafea, J. Kinch, J. Feehely, P. Ifopo, R. Hills, S. Alefaio, S. Meo, S. Troniak, S. Malimali, S. George, T. Tauaefa and T. Obed. 2009a. Community Conserved Areas: A Review of Status and Needs in Melanesia and Polynesia. ICCA regional review for CENESTA/TILCEPA/TGER/IUCN/GEF-SGP. Available at http://cmsdata.iucn.org/downloads/melanesia_polynesia_regional_icca_review.pdf.
- Govan, H. et al. 2009b. Status and Potential of Locally-Managed Marine Areas in the South Pacific: Meeting Nature Conservation and Sustainable Livelihood Targets through Wide-Spread Implementation of LMMAs. SPREP/WWF/WorldFish-Reefbase/CRISP. Available at http://www.sprep.org/att/publication/000646_LMMA_report.pdf.
- Government of South Australia. 2010. Marine Parks – Introduction. Online, www.sa.gov.au/subject/Water,+energy+and+environment/Environment+and+natural+resources/Marine+conservation.
- Graham, J., B. Amos, T. Plumptre. 2003. Governance Principles for Protected Areas in the 21st Century. Paper for the Vth IUCN World Parks Congress, Durban, South Africa. Ottawa: Institute On Governance. Available at http://iog.ca/sites/iog/files/pa_governance2.pdf
- Guignier, A., and M. Prieur. 2010. Legal Framework for Protected Areas: France. Gland, Switzerland: IUCN.
- Hanna, K.S., D.A. Clark and D.S. Slocombe (eds.). 2007. *Transforming Parks and Protected Areas: Policy and Governance in a Changing World*. New York: Routledge.
- Harman, Sir John. 2005. The Relationship Between Good Governance and Environmental Compliance and Enforcement. Seventh International Conference on Environmental Compliance and Enforcement, 9–15 April 2005. Conference Proceedings Volume 1. Available at http://www.inece.org/conference/7/vol1/04_Harman.pdf.

- Institute On Governance, in collaboration with Parks Canada. 2002. Governance Principles for Protected Areas in the 21st Century: A Discussion Paper. Ottawa: Institute on Governance. Available at http://iog.ca/sites/iog/files/PA_governance.pdf.
- International Maritime Organization (IMO). 2007. Marine Environment Protection Committee (MEPC), 56th session: 9–13 July 2007. Online, http://www.imo.org/Newsroom/mainframe.asp?topic_id=109&doc_id=7537.
- . (Undated a.) Particularly Sensitive Sea Areas. Online, http://www.imo.org/environment/mainframe.asp?topic_id=1357
- . (Undated b.) Special Areas under MARPOL. Online, http://www.imo.org/Environment/mainframe.asp?topic_id=760.
- IUCN. 1994. Guidelines for Protected Area Management Categories. IUCN Commission on National Parks and Protected Areas with the assistance of the World Conservation Monitoring Centre. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/1994-007-En.pdf>.
- . 2008. Governance of Natural Resources, Equity and Human Rights. Online, http://www.iucn.org/about/work/initiatives/sp_cprihome/sp_cpri_themes/_sp_cpri_natural_resources.
- . 2010a. Members database. Online, http://www.iucn.org/about/union/members/who_members/members_database/.
- . 2010b. Our Approach: Governance. Online, http://iucn.org/about/work/global_programme/our_approach.
- IUCN World Commission on Protected Areas (WCPA). 2007a. Establishing Networks of Marine Protected Areas: A Guide for Developing National and Regional Capacity for Building MPA networks. Non-technical summary report. Available at <http://cmsdata.iucn.org/downloads/nsmail.pdf>.
- . 2007b. Guidelines for Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management. As approved by the 67th meeting of the IUCN Council, 14–16 May 2007. Available at http://cmsdata.iucn.org/downloads/ln250507_ppguidelines.pdf.
- Jones, B., S. Stolton and N. Dudley. 2005. Private protected areas in East and Southern Africa: Contributing to Biodiversity Conservation and Rural Development. *Parks* 15(2): 67–77. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Kelleher, G. (ed.). 1999. Guidelines for Marine Protected Areas. WCPA Best Practice Protected Area Guidelines Series No. 3. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-003.pdf>.
- Kimball, L.A. 2003. International Ocean Governance: Using International Law and Organizations to Manage Marine Resources Sustainably. Gland and Cambridge: IUCN. Available at http://cmsdata.iucn.org/downloads/intl_ocean_governance_english.pdf.
- . 2005. The International Legal Regime of the High Seas and the Seabed Beyond the Limits of National Jurisdiction and Options for Cooperation for the Establishment of Marine Protected Areas (MPAs) in Marine Areas Beyond the Limits of National Jurisdiction. CBD Technical Series No. 19. Montreal: Secretariat of the Convention on Biological Diversity. Available at <http://www.cbd.int/doc/publications/cbd-ts-19.pdf>.
- Kothari, A. 2006a. Collaboratively Managed Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.), *Managing Protected Areas: A Global Guide*. London: Earthscan.
- . 2006b. Community Conserved Areas: Towards Ecological and Livelihood Security. *Parks* 16(1): 3–13. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Kulshreshtha, S., and M. Johnston. 2004. Economic Value of Stored Carbon in Protected Areas: A Case Study of Canadian National Parks. Proceedings of the Fifth International Conference on Science and Management of Protected Areas, Wolfville, Nova Scotia, Canada, 11–16 May 2003. Available at <http://www.sampaa.org/publications/conference-proceedings-1991-2000/2003-proceedings/economic-analysis-protected-areas/Kulshreshtha%20and%20Johnston%202004.pdf>.
- La Viña, A.G.M., J.L. Kho and M.J. Caleda. 2010. Legal Framework for Protected Areas: Philippines. Gland, Switzerland: IUCN.
- Laffoley, D. d'A. (ed.). 2008. Towards Networks of Marine Protected Areas. The MPA Plan of Action for IUCN's World Commission on Protected Areas. Gland: IUCN-WCPA. Available at <http://www.wdpa-marine.org/MPAResources/MPAPlanningResources/Docs/Towards%20networks%20of%20marine%20protected%20areas.pdf>.
- Laffoley, D., J. Day, L. Wood and B. Barr. 2008. Marine Protected Areas. In N. Dudley and S. Stolton (eds.), *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Laffoley, D. d'A., and G. Grimsditch (eds.). 2009. The Management of Natural Coastal Carbon Sinks. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/carbon_management_report_final_printed_version.pdf.
- Land Trust Alliance (LTA). 2004. Land Trust Standards and Practices (Revised 2004). Washington, DC: Land Trust Alliance. Available at <http://www.landtrustalliance.org/learning/sp/lt-standards-practices07.pdf>.
- . 2010. About Us: Leadership in Land Conservation. Online, <http://www.landtrustalliance.org/about-us>.
- Langholz, J.A., and W. Krug. 2004. New Forms of Biodiversity Governance: Non-State Actors and the Private Protected Area Action Plan. *Journal of International Wildlife Law and Policy* 7(1): 9–29. Available at http://www.earthlore.ca/clients/WPC/English/grfx/sessions/PDFs/session_2/Langholz.pdf.

- Lausche, B. 1980. Guidelines for Protected Areas Legislation. IUCN Environmental Policy and Law Paper No. 16. Gland: IUCN and Nairobi: UNEP. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-016.pdf>.
- Lockwood, M., G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan
- Lorenzi, S., and G. Borrini-Feyerabend. 2010. Community Conserved Areas: Legal Framework for the Natural Park of the Ampezzo Dolomites (Italy). Gland, Switzerland: IUCN.
- Mackenzie, R., F. Burhenne-Guilmin, A.G.M. La Viña and J.D. Werksman. 2003. An Explanatory Guide to the Cartagena Protocol on Biosafety. IUCN Environmental Policy and Law Paper No. 46. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-046.pdf>.
- Michelot, A., with B. Ouedraogo. 2010. Transboundary Protected Areas: Legal Framework for the W Transboundary Biosphere Reserve (Benin, Burkina Faso, Niger). Gland, Switzerland: IUCN.
- Miller, K., and H. Kim. 2010. Ecological Corridors: Legal Framework for the Baekdu Daegan Mountain System (South Korea). Gland, Switzerland: IUCN.
- Mitchell, B.A. 2005. Editorial. *Parks* 15(2): 1–5. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- . 2007. “Who’s Doing the Protecting in Protected Areas?” A Global Perspective on Protected Area Governance. *The George Wright Forum* 24(3): 81–91. Available at <http://www.georgewright.org/243mitchell.pdf>.
- Moore, P., and P. Shadie. 2007. Connectivity Conservation: International Experience in Planning, Establishment and Management of Biodiversity Corridors. Background paper. IUCN Regional Environmental Law Programme, Asia and Regional Protected Areas Programme, Asia. Unpublished. Available at http://cmsdata.iucn.org/downloads/070723_bci_international_report_final.pdf.
- MPA News. 2009. South Africa announces plan for large offshore MPA. Vol. 10, No. 11, June. Online, <http://depts.washington.edu/mpanews/MPA108.htm#PEI>.
- National Oceanic and Atmospheric Administration (NOAA). 2006. Marine Managed Areas: Best Practices for Boundary Making. Marine Boundary Working Group, Federal Geographic Data Committee. Charleston, SC: NOAA Coastal Services Center. Available at http://www.csc.noaa.gov/products/mb_handbook/MMA_Boundaries_Handbook.pdf.
- New Zealand Department of Conservation and Ministry of Fisheries. 2005. Marine Protected Areas Policy and Implementation Plan. Wellington: Department of Conservation and Ministry of Fisheries. Available at <https://www.biodiversity.govt.nz/pdfs/seas/MPA-Policy-and-Implementation-Plan.pdf>.
- New Zealand Ministry of Fisheries and Department of Conservation. 2008. Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines. Wellington: Ministry of Fisheries and Department of Conservation. Available at <https://www.biodiversity.govt.nz/pdfs/seas/MPA-classification-protection-standard.pdf>.
- Notarbartolo di Sciara, G., D. Hyrenbach and T. Agardy. 2007. The Pelagos Sanctuary for Mediterranean Marine Mammals: Case Study. Available at http://www.cetaceanalliance.org/download/literature/NotarbartolodiSciara_etal_2007.pdf.
- Notarbartolo di Sciara, G., T. Agardy, D. Hyrenbach, T. Scovazzi and P. Van Klaveren. 2008. The Pelagos Sanctuary for Mediterranean Marine Mammals. *Aquatic Conservation: Marine and Freshwater Ecosystems* 18: 367–391. Available at http://www.tethys.org/_download/literature/Notarbartolo_etal_2008.pdf.
- Organisation for Economic Co-operation and Development (OECD). 2007. Glossary of Statistical Terms - Definition of governance. Online, <http://stats.oecd.org/glossary/detail.asp?ID=7236>.
- OSPAR Commission. 2008. 2007 Progress Report on the OSPAR Network of Marine Protected Areas. Available at http://www.ospar.org/v_publications/download.asp?v1=p00359.
- Oviedo, G. 2006. Community Conserved Areas in South America. *Parks* 16(1): 49–55. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Paterson, A.R. 2010. Legal Framework for Protected Areas: South Africa. Gland, Switzerland: IUCN.
- Pathak, N. 2006. Community Conserved Areas in South Asia. *Parks* 16(1): 56–62. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Pathak, N., and A. Kothari. 2010. Indigenous and Community Conserved Areas: The Legal Framework in India. Gland, Switzerland: IUCN.
- Patry, M. 2008. World Heritage and IUCN Categories. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Permanent Secretariat of the Alpine Convention. 2005. The Multi-Annual Work Programme of the Alpine Conference 2005–2010. Innsbruck. Available at http://www.alpconv.org/NR/rdonlyres/26C9672B-98A8-4808-95A9-515AC4D79F7E/0/MAP_E_GESAMT.pdf.
- Phillips, A. 2002. Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes. WCPA Best Practice Protected Area Guidelines Series No. 9. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-009.pdf>.

- Rambaldi, D.M., R.V Fernandes and M.A.R. Schmidt. 2005. Private Protected Areas and their Key Role in the Conservation of the Atlantic Forest Biodiversity Hotspot, Brazil. *Parks* 15(2): 30–38. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Ramsar Secretariat. 2006. The Ramsar Convention Manual: A Guide to the Convention on Wetlands (Ramsar, Iran, 1971). 4th edition. Gland, Switzerland: Ramsar Convention Secretariat. Available at http://www.ramsar.org/pdf/lib/lib_manual2006e.pdf.
- . 2008. Wetlands of International Importance and the IUCN System of Protected Area Management Categories. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- . (Undated.) Transboundary Ramsar Sites. Online, http://www.ramsar.org/cda/en/ramsar-documents-trss-transboundary-ramsar-21073/main/ramsar/1-31-119%5E21073_4000_0_.
- Ritchie, K.B., and B.D. Keller (eds.). 2008. A Scientific Forum on the Gulf of Mexico: The Islands in the Stream Concept. Marine Sanctuaries Conservation Series NMSP-08-04. Silver Spring, MD: US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Sanctuary Program. Available at http://isurus.mote.org/Keys/microbiology/Scientific_Forum_Gulf_of_mexico.pdf.
- Salm, R., J. Clark and E. Siirila. 2000. *Marine and Coastal Protected Areas: A Guide for Planners and Managers*. Third edition. Washington, DC: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2000-038.pdf>.
- Sandwith, T., C. Shine, L. Hamilton and D. Sheppard. 2001. Transboundary Protected Areas for Peace and Co-operation. WCPA Best Practice Protected Area Guidelines Series No. 7. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-007.pdf>.
- Saunders, S., T. Easley and S. Farver. 2009. National Parks in Peril: The Threats of Climate Disruption. Denver, CO: Rocky Mountain Climate Organization and Washington, DC: Natural Resources Defense Council. Available at <http://www.rockymountainclimate.org/website%20pictures/National-Parks-In-Peril-final.pdf>.
- Schliep, R., M. Bertzky, M. Hirschnitz and S. Stoll-Kleemann. 2008. Changing Climate in Protected Areas? Risk Perception of Climate Change by Biosphere Reserve Managers. *GAIA* 17(1): 116–124. Available at <http://www.ingentaconnect.com/content/oekom/gaia/2008/00000017/A00101s1/art00009>.
- Secretariat of the Convention on Biological Diversity (SCBD). 2004a. Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities. CBD Guidelines Series. Montreal: Secretariat of the CBD. Available at <http://www.cbd.int/doc/publications/akwe-brochure-en.pdf>.
- . 2004b. Technical Advice on the Establishment and Management of a National System of Marine and Coastal Protected Areas. CBD Technical Series No. 13. Available at <http://www.cbd.int/doc/publications/cbd-ts-13.pdf>.
- Sobel, J., and C. Dahlgren. 2004. *Marine Reserves: A Guide to Science, Design, and Use*. Washington, DC: Island Press.
- Solano, P. 2010. Legal Framework for Protected Areas: Peru. Gland, Switzerland: IUCN.
- Soto Oyarzún, L. 2010. Private Protected Areas: Legal Framework for Pumalin Park (Chile). Gland, Switzerland: IUCN.
- South Africa Department of Environmental Affairs and Tourism (DEAT). 2009a. Draft notice declaring the Prince Edward Islands Marine Protected Area. Notice 421 of 2009. Government Gazette, May 8. pp. 125–126. Available at <http://www.greengazette.co.za/docs/2009/05/Gazettes/National/20090508%20-%20National%20Gazette%20No%2032198%20of%2008-May-2009,%20Volume%20527.pdf>.
- . 2009b. Draft Regulations on the Management and Protection, Prince Edward Islands Marine Protected Area. Notice 422 of 2009. Government Gazette, May 8. pp. 127–133. Available at <http://www.greengazette.co.za/docs/2009/05/Gazettes/National/20090508%20-%20National%20Gazette%20No%2032198%20of%2008-May-2009,%20Volume%20527.pdf>.
- . 2009c. Minister van Schalkwyk to gazette Prince Edwards Islands Marine Protected Area (MPA) proposal. Press statement. May 7. Online, <http://www.info.gov.za/speeches/2009/09050809551002.htm>.
- Stec, S., and S. Casey-Lefkowitz. 2000. The Aarhus Convention: An Implementation Guide. UN Economic Commission For Europe. New York and Geneva: UN. Available at <http://www.unece.org/env/pp/acig.pdf>.
- Tethys Research Institute. (Undated.) Pelagos Sanctuary (map). Online, <http://www.tethys.org/sanctuary.htm>.
- Thomas, L., and J. Middleton. 2003. Guidelines for Management Planning of Protected Areas. WCPA Best Practice Protected Area Guidelines Series No. 10. Gland and Cambridge: IUCN. Available at <http://intranet.catie.ac.cr/intranet/posgrado/Manejo%20Areas%20Protegidas/Documentos/Guide%20line%20management%20planning.pdf>.
- Tropical Coasts*. 2008. Conserving the Sulu and Sulawesi Seas. Vol. 15, No. 1, July. Available at http://d130148.u37.wsiph2.com/publications/TC/tc_1501.pdf.
- Tu, M. 2009. Assessing and Managing Invasive Species within Protected Areas. Protected Area Quick Guide Series. Arlington, VA: The Nature Conservancy. Available at <http://www.gisp.org/whatsnew/docs/IAS&protectedareas.pdf>.
- United Nations (UN). 1992. Agenda 21: The United Nations Programme of Action From Rio. Online, <http://www.un.org/esa/dsd/agenda21>.

- . 2002. Plan of Implementation of the World Summit on Sustainable Development. Resolution 2. Adopted at the 17th plenary meeting, on 4 September 2002. World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002. New York: UN. Available at http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf.
- . 2003. Indicators for Monitoring the Millennium Development Goals: Definitions Rationale Concepts and Sources. New York: UN. Available at <http://mdgs.un.org/unsd/mdg/Resources/Attach/Indicators/HandbookEnglish.pdf>.
- . 2009. Ecosystem Approaches. Division for Ocean Affairs and the Law of the Sea. Online, http://www.un.org/Depts/los/ecosystem_approaches/ecosystem_approaches.htm.
- United Nations Development Programme (UNDP). 1997. Governance for Sustainable Human Development: A UNDP Policy Document. Online, <http://mirror.undp.org/magnet/policy>.
- . 2007. Governance Indicators: A Users' Guide. Second Edition. Bureau for Development Policy, Democratic Governance Group. New York: UNDP. Available at http://www.undp.org/oslocentre/docs07/undp_users_guide_online_version.pdf.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2010. What is Good Governance? Online, <http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp>.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO). 1995. Biosphere Reserves: Seville Strategy for Biosphere Reserves and Statutory Framework of the World Network of Biosphere Reserves. Paris: UNESCO. Available at <http://unesdoc.unesco.org/images/0010/001038/103849eb.pdf>.
- . 2000. Seville +5 Recommendations for the establishment and functioning of Transboundary Biosphere Reserves. Available at <http://www.unesco.org/mab/doc/brs/TBR.pdf>.
- . 2008a. Madrid Action Plan for Biosphere Reserves (2008–2013). Available at <http://unesdoc.unesco.org/images/0016/001633/163301e.pdf>.
- . 2008b. Operational Guidelines for the Implementation of the World Heritage Convention. Intergovernmental Committee for the Protection of the World Cultural And Natural Heritage. Paris: UNESCO World Heritage Centre. Available at <http://whc.unesco.org/archive/opguide08-en.pdf>.
- . 2009. Global Open Oceans and Deep Seabed (GOODS): Biogeographic Classification. IOC Technical Series No. 84. Paris: UNESCO-IOC. Available at http://ioc-unesco.org/components/com_oe/oe.php?task=download&id=7094&version=1.0&lang=1&format=1.
- . 2010a. List of Transboundary Biosphere Reserves. Online, http://www.unesco.org/mab/doc/brs/TBR_list.pdf.
- . 2010b. World Heritage Marine Programme. Online, <http://whc.unesco.org/en/marine-programme>.
- United Nations Environment Programme (UNEP). 2006. Ecosystems and Biodiversity in Deep Waters and High Seas. UNEP Regional Seas Reports and Studies No. 178. UNEP and IUCN. Available at http://www.unep.org/pdf/EcosystemBiodiversity_DeepWaters_20060616.pdf.
- . 2008. The UNEP Large Marine Ecosystem Report: A Perspective on Changing Conditions in the LMEs of the World's Regional Seas. UNEP Regional Seas Report and Studies No. 182. Available at http://www.lme.noaa.gov/LMEWeb/Downloads/unep_lme_report.zip.
- . 2010. Environmental Law: Report of the Executive Director. Draft guidelines for the development of national legislation on access to information, public participation and access to justice in environmental matters. Governing Council of the United Nations Environment Programme (UNEP/GCSS.XI/8). Available at <http://www.unep.org/gc/gcss-x/download.asp?ID=1204>.
- United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). 2007. Global List of Transboundary Protected Areas. Available at http://www.tbpa.net/docs/pdfs/2007_UNEP-WCMC_Global_List_of_Transboundary_Protected%20Areas.pdf.
- . 2009. World Database on Protected Areas Annual Release.
- . 2010. Protected Planet: The Protected Areas Portal. Data Standards for the World Database on Protected Areas. Cambridge: UNEP-WCMC. Available at <http://www.wdpa.org/PDF/Wdpa%20Data%20Standard.pdf>.
- United Nations Office of the High Commissioner for Human Rights (OHCHR). 2007. Good Governance Practices for the Protection of Human Rights. New York and Geneva: UN. Available at <http://www.ohchr.org/Documents/Publications/GoodGovernance.pdf>.
- VanderZwaag, D.L., and P. Macnab. 2010. Marine Protected Areas: Legal Framework for the Gully off the Coast of Nova Scotia (Canada). Gland, Switzerland: IUCN.
- Welch, D. 2005. What Should Protected Areas Managers Do in the Face of Climate Change. *The George Wright Forum* 22(1): 75–93. Available at <http://www.georgewright.org/221welch.pdf>.
- Wolfrum, R., and R. Grote (eds.). 1971. *Constitutions of the Countries of the World*. (Loose-leaf.) New York: Oxford University Press.
- Worboys, G.L., M. Lockwood and T. De Lacy. 2005. *Protected Area Management: Principles and Practice*. Second Edition. Oxford: Oxford University Press.
- Worboys, G.L., C. Winkler and M. Lockwood. 2006. Threats to Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.

- Worboys, G.L., W.L. Francis and M. Lockwood. 2010. *Connectivity Conservation Management: A Global Guide*. London: Earthscan.
- World Alliance of Mobile Indigenous Peoples (WAMIP). 2009. About WAMIP. Online, http://www.wamip.org/index.php?option=com_content&view=article&id=56%3A-cenesta-in-brief&catid=2&Itemid=94&lang=en.
- World Bank. 2006. Scaling Up Marine Management: The Role of Marine Protected Areas. Report No. 36635 – GLB. Environment Department, Sustainable Development Network. Available at http://siteresources.worldbank.org/INTCMM/Publications/21108865/Final_Printed_Version_MPA_ESW.pdf.
- . Governance Matters 2009. Worldwide Governance Indicators, 1996–2008. Online, <http://info.worldbank.org/governance/wgi/index.asp>.
- World Commission on Environment and Development (WCED). 1987. *Our Common Future*. Oxford: Oxford University Press.
- World Resources Institute (WRI). 2005. *Ecosystems and Human Well-Being: Biodiversity Synthesis*. Washington, DC: Island Press.

Legal instruments

1. Global

1.1 Conventions and protocols

- | | |
|---|----------------------------|
| Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), 2 February 1971 | TRE-000531 |
| Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), 16 November 1972 | TRE-155235 |
| International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), 17 February 1978 | TRE-000112 |
| Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 3 March 1973 | TRE-000483 |
| Convention on the Conservation of Migratory Species of Wild Animals (CMS), 23 June 1979 | TRE-000495 |
| United Nations Convention on the Law of the Sea (UNCLOS), 10 December 1982 | TRE-000753 |
| International Labour Organization Convention 169 on Indigenous and Tribal Peoples in Independent Countries (ILO 169), 27 June 1989 | TRE-001134 |
| Convention on Biological Diversity (CBD), 5 June 1992 | TRE-001148 |
| United Nations Framework Convention on Climate Change (UNFCCC), 9 May 1992 | TRE-001147 |
| Agreement relating to the Implementation of Part XI of the United Nations Conventions on the Law of the Sea of 10 December 1982, 1 September 1994 | TRE-001196 |
| 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, 4 August 1995 | TRE-001237 |
| Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 29 January 2000 | TRE-001327 |
| Convention on the Protection of the Underwater Cultural Heritage, 2001 | ANA-068745 |

1.2 Declaration and charters

Declarations

- | | |
|---|----------------------------|
| Universal Declaration of Human Rights, 1948 | |
| Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 1972 | |
| Rio Declaration on Environment and Development, 1992 | MON-070929 |
| Rome Declaration on the Implementation of the Code of Conduct for responsible Fisheries, 1999 | MON-070245 |
| United Nations Millennium Declaration, 2000 | MON-070124 |
| Johannesburg Declaration on Sustainable Development, 2002 | MON-070063 |
| United Nations Declaration on the Rights of Indigenous Peoples, 13 September 2007 | MON-083331 |

Madrid Declaration on the UNESCO Man and the Biosphere Programme and the World Network of Biosphere Reserves, 2008

<http://www.unesco.org/mab/doc/brs/MadridDeclaration.pdf>

Charters

Earth Charter (2000)

World Charter for Nature (1982)

2. Regional

2.1 Conventions, agreements, protocols

Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere (Western Hemisphere Convention), 12 October 1940	TRE-000085
African Convention on the Conservation of Nature and Natural Resources (Algiers Convention), 15 September 1968	TRE-000492
Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention), 16 February 1976	TRE-000543
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), 19 September 1979	TRE-000473
Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region (East African Protocol), 21 June 1985	TRE-000821
Agreement on the Conservation of Seals in the Wadden Sea, 16 October 1990	TRE-001100
Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 18 January 1990	TRE-001040
Agreement on the Conservation of Populations of European Bats (EUROBATS) 4 December 1991	TRE-001154
Convention on the Protection of the Alps (Alpine Convention), 7 November 1991	TRE-001126
Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) 17 March 1992	TRE-001139
Convention for the Conservation of the Biodiversity and the Protection of Wilderness Areas in Central America (Convenio para la Conservación de la Biodiversidad y Protección de Áreas Silvestres Prioritarias en América Central), 5 June 1992	TRE-001162
Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), 9 April 1992	TRE-001153
Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), 22 September 1992	TRE-001152
Protocol on the Implementation of the Alpine Convention of 1991 relating to the Conservation of Nature and the Countryside, 20 December 1994	
Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), 16 June 1995	TRE-001221
Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Amendments to the Barcelona Convention), 10 June 1995	TRE-001284
Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA and Biodiversity Protocol), 10 June 1995	TRE-001220
Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), 24 November 1996	TRE-001242
Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), 25 June 1998	TRE-001276
Agreement Concerning the Creation of a Marine Mammal Sanctuary in the Mediterranean, 25 November 1999	TRE-001399
European Landscape Convention, 2000	TRE-001326
Agreement on the Conservation of Albatrosses and Petrels (ACAP), 19 June 2001	TRE-001351
Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution, 14 June 2002	TRE-154497

- African Convention on the Conservation of Nature and Natural Resources (Maputo, revised version), 12 July 2003 [TRE-001395](#)
- Agreement on the Conservation of Gorillas and their Habitats, 26 October 2007 [TRE-144926](#)

2.2 Memoranda of understanding

- Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane, 13 December 1998 [TRE-001318](#)
- Memorandum of Understanding Concerning Conservation Measures for the Slender-Billed Curlew, 10 September 1994 [TRE-001322](#)
- Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa, 29 May 1999 [TRE-001323](#)
- Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard, 5 October 2002 [TRE-001414](#)
- Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia, 1 September 2001 [TRE-002342](#)
- Memorandum of Understanding Concerning Conservation and Restoration of the Bukhara Deer, 16 May 2002 [TRE-001352](#)
- Memorandum of Understanding Concerning Conservation Measures for the Aquatic Warbler, 30 April 2003 [TRE-001413](#)
- Memorandum of Understanding Concerning Conservation Measures for the West African Populations of the African Elephant, 22 November 2005 [TRE-144933](#)
- Memorandum of Understanding Concerning Conservation, Restoration and Sustainable Use of the Saiga Antelope, 24 September 2006 [TRE-144929](#)
- Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region, 6 September 2006 [TRE-146843](#)
- Memorandum of Understanding Between the Argentine Republic and the Republic of Chile on the Conservation of the Ruddy-Headed Goose, 21 November 2006 [TRE-148523](#)
- Memorandum of Understanding on the Conservation of Southern South American Migratory Grassland Bird Species and their Habitats, 26 August 2007 [TRE-146845](#)
- Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats Throughout their Range, 31 October 2007 [TRE-146844](#)
- Memorandum of Understanding Concerning the Conservation of the Manatee and Small Cetaceans of Western Africa and Macaronesia, 3 October 2008 [TRE-146853](#)
- Memorandum of Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia, 22 October 2008 [TRE-146837](#)
- Memorandum of Understanding Concerning Conservation Measures for the Eastern Atlantic Populations of the Mediterranean Monk Seal, 18 October 2007 [TRE-146847](#)
- Memorandum of Understanding on the Conservation of High Andean Flamingos and their Habitats, 4 December 2008 [TRE-146959](#)

2.3 Supranational instruments: EU Directives

- Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) 25 April 1979 (last amended by Directive 2009/147/EC) [LEX-FAOC019113](#)
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) 21 May 1992 [LEX-FAOC034772](#)
- Directive 2008/99/EC of the European Parliament and of the Council on the protection of the environment through criminal law, 19 November 2008 [LEX-FAOC083699](#)

2.4 Declaration and charters

- Joint Declaration on the Protection of the Wadden Sea (1982)

3. National legislation

3.1 Constitutions

Constitution of Angola, 1992
 Constitution of Argentina, 1994
 Constitution of Brazil, 1988, as amended up to 2008
 Constitution of Bulgaria, 1991, as amended up to 2006
 Constitution of Colombia, 1991, as amended up to 2005
 Constitution of El Salvador, 1983, as amended up to 2003
 Constitution of Fiji, 1988
 Constitution of France, 2005
<http://www.legifrance.gouv.fr/html/constitution/constitution.htm>
 Constitution of Guyana, 1980, as amended up to 2003
 Constitution of Malawi, as amended up to 1998
 Constitution of Marshall Islands, 1979, as amended up to 1990
 Constitution of Nigeria, 1999
 Constitution of Paraguay, 1992
 Constitution of Peru, 1993
 Constitution of Philippines, 1987
 Constitution of Slovenia, 2006
 Constitution of South Africa, 1996, as amended up to 1997

3.2 Codes

Burkina Faso

Pastoral code (Code pastoral)

France

Land Use Planning Code (Code de l'Urbanisme), 1973

<http://www.legifrance.gouv.fr/affichCode.do?cidTexte=LEGITEXT000006074075&dateTexte=20100913>

Environment Code (Code de l'Environnement)

Legislative part

[LEX-FAOC021406](#)

Regulation part

[LEX-FAOC079232](#)

Guinea

Pastoral code (Loi L/95/51/CTRN portant Code pastoral), 29 August 1995

[LEX-FAOC004469](#)

Mali

Pastoral Code

Mauritania

Pastoral code (Loi n°44-2000 portant Code pastoral en Mauritanie), 26 July 2000

[LEX-FAOC036325](#)

Niger

Rural Code (Ordonnance n° 93-015 fixant les principes d'orientation du Code rural), 2 March 1993

[LEX-FAOC004660](#)

3.3 National statutory and regulatory instruments

Australia

Commonwealth

National Parks and Wildlife Conservation Act 1975 (Commonwealth), 13 March 1975 [LEX-FAOC003654](#)

Great Barrier Reef Marine Park Act 1975 (Commonwealth), 20 June 1975 [LEX-FAOC014966](#)

Coastal Waters (State Powers) Act 1980 (Commonwealth), 29 May 1980 [LEX-FAOC006425](#)

Coastal Waters (Northern Territory Title) Act 1980 (Commonwealth), 29 May 1980 [LEX-FAOC006426](#)

Commonwealth Authorities and Companies Act 1997 (Commonwealth)

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth), 16 July 1999 [LEX-FAOC017072](#)

Environment Protection and Biodiversity Conservation Regulations 2000 (Commonwealth), 16 July 2000 [LEX-FAOC025399](#)

National Parks and Wildlife Conservation Act 1975 (Commonwealth) (not in force)

States and territories

National Parks and Wildlife Act 1972 (South Australia), 27 April 1972 [LEX-FAOC044295](#)

National Parks and Wildlife Act 1974 (New South Wales), 27 November 1974 [LEX-FAOC013704](#)

Environmental Planning and Assessment Act 1979 (New South Wales)

Fisheries Act 1982 (South Australia) (not in force)

Nature Conservation Act 1992 (Queensland) [LEX-FAOC040998](#)

Fisheries Management Act 2007 (South Australia), 1 September 2007 [LEX-FAOC075822](#)

Canada

Oceans Act 1996, S.C. 1996, c. 31 (Federal), 18 December 1996 [LEX-FAOC022382](#)

Provincial Parks and Conservation Reserves Act 2006 (Ontario) (SO 2006, c. 12) [LEX-FAOC093740](#)

Cook Islands

Environment Act 2003 (No. 23 of 2003), 19 November 2003 [LEX-FAOC048637](#)

Denmark

Greenland National Park, declared by the Greenland National Council and in 1980 confirmed as a national park under Greenlandic law through 'Executive Order no. 7 of 17 June 1992 from the Greenland Home Rule Authority concerning the National Park in North and East Greenland, as amended by Executive Order no. 16 of 5 October 1999.

Protection of Nature Act 1992, 3 January 1992, consolidated 18 August 2004 [LEX-FAOC019308](#)

Ecuador

Galapagos Marine Reserve, Regulation pursuant to the special law for the province of Galapagos (Reglamento a la ley especial para la provincia de Galápagos)

Fiji

Fisheries Act 1942, 1 January 1942 [LEX-FAOC001155](#)

France

Planning Law No. 99-533 of 29 June 1999 on land use planning and sustainable development (Voynet Act), (Loi n°99-533 d'orientation du 25 juin 1999 pour l'aménagement et le développement durable du territoire et portant modification de la loi n° 95-115 du 4 février 1995 d'orientation pour l'aménagement et le développement du territoire) [LEX-FAOC016412](#)

Decree No. 2002-560 of 18 April 2002 Approving Collective infrastructure services (Décret n°2002-560 du 18 avril 2002 approuvant les schémas de services collectifs)
<http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000412740&fastPos=2&astReqId=1379203354&categorieLien=cid&oldAction=rechTexte>

Programmatic Law No. 2009-967 of 3 August 2009 for the implementation of the Grenelle Environment forum (Law Grenelle I), (Loi n°2009-967 du 3 août 2009 de programmation relative à la mise en œuvre du Grenelle de l'environnement, dite Loi Grenelle I)

[LEX-FAOC093244](#)

Law No 2010-788 of 12 July 2010 regarding national environment commitment (Law Grenelle II) (Loi n° 2010-788 of 12 juillet 2010 portant engagement national pour l'environnement)

Guyana

Amerindian Act 2006

Pacific Island of Niue (New Zealand)

Environment Act 2003 (No. 264 of 2003), 19 December 2003

[LEX-FAOC051781](#)

Phoenix Islands

Kiribati Regulation of 2008 under the Kiribati Environment Act of 1999

South Africa

National Environmental Management Act 1998 (No. 107 of 1998), 19 November 1998

[LEX-FAOC018752](#)

Marine Living Resources Act 1998 (18 of 1998)

Public Finance Management Act 1999 (1 of 1999)

National Environmental Management Protected Areas Act, 2003 (No. 57 of 2003), 11 February 2004

[LEX-FAOC045046](#)

United States

Freedom of Information Act (5 USC Section 552)

Florida Keys National Marine Sanctuary and Protection Act, 1990 (Pub. L. No. 101-605, 104 Stat. 3089)

National Marine Sanctuaries Act (16 USC 1431-1445)

Papahānaumokuākea Marine National Monument, Hawaii, Presidential Proclamation 8031 of 2006 under the Antiquities Act of 1906

Marianas Trench Marine National Monument, Presidential Proclamation 8335 of 2009 under the Antiquities Act of 1906

Pacific Remote Islands Marine National Monument, Presidential Proclamation 8336 of 2009 under the Antiquities Act of 1906

4. Cases

European Court of Justice

Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v. Staatssecretaris van Landbouw, Natuurbeheer en Visserij, Case C-127/02, ECJ, 7 September 2004

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:262:0002:0002:EN:PDF>

Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland, C-6/04, ECJ, 20 October 2005

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2005:315:0005:0006:EN:PDF>

Resolutions, recommendations and COP decisions

- Bern Convention Standing Committee (SC). 1989. Recommendation No. 16 (1989) of the standing committee on areas of special conservation interest. Adopted by the Standing Committee on 9 June 1989. Online, <https://wcd.coe.int/ViewDoc.jsp?id=1485727&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FD864&BackColorLogged=FDC864>.
- Bern Convention Standing Committee (SC). 1998. Resolution No. 5 (1998) concerning the rules for the Network of Areas of Special Conservation Interest (Emerald Network). Adopted by the Standing Committee on 4 December 1998. Online, <https://wcd.coe.int/ViewDoc.jsp?id=1475223&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FD864&BackColorLogged=FDC864>.
- Convention on Biological Diversity (CBD) COP. 1994. Decision I/9: Medium-term programme of work of the Conference of the Parties. First Meeting of the Conference of the Parties to the Convention on Biological Diversity, Nassau, Bahamas, 28 November–9 December 1994. Available at <http://www.cbd.int/decision/cop/?id=7069>.
- Convention on Biological Diversity (CBD) COP. 1995. Decision II/10: Conservation and sustainable use of marine and coastal biological diversity. Second Meeting of the Conference of the Parties to the Convention on Biological Diversity, Jakarta, Indonesia, 6–17 November 1995. Available at <http://www.cbd.int/decision/cop/?id=7083>.
- Convention on Biological Diversity (CBD) COP. 1998. Decision IV/5: Conservation and sustainable use of marine and coastal biological diversity, including a programme of work. Fourth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Bratislava, Slovakia, 4–15 May 1998. Available at <http://www.cbd.int/decision/cop/?id=7128>.
- Convention on Biological Diversity (CBD) COP. 2000. Decision V/6: Ecosystem approach. Fifth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Nairobi, Kenya, 15–26 May 2000. Available at <http://www.cbd.int/doc/decisions/cop-05/full/cop-05-dec-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2002. Decision VI/23: Alien species that threaten ecosystems, habitats or species. Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity, the Hague, Netherlands, 7–19 April 2002. Available at <http://www.cbd.int/doc/decisions/cop-06/full/cop-06-dec-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2004. Decision VII/5: Marine and Coastal Biological Diversity. Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, 9–20 February 2004. Available at <http://www.cbd.int/doc/decisions/cop-07/cop-07-dec-05-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2004. Decision VII/11: VII/11. Ecosystem approach. Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, 9–20 February 2004. Available at <http://www.cbd.int/doc/decisions/cop-07/cop-07-dec-11-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2004. Decision VII/28: Protected areas (Articles 8 (a) to (e)). Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity, Kuala Lumpur, Malaysia, 9–20 February 2004. Available at <http://www.cbd.int/doc/decisions/cop-07/cop-07-dec-28-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2006. Decision VIII/21: Marine and coastal biological diversity: conservation and sustainable use of deep seabed genetic resources beyond the limits of national jurisdiction. Eighth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Curitiba, Brazil, 20–31 March 2006. Available at <http://www.cbd.int/doc/decisions/cop-08/cop-08-dec-21-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2006. Decision VIII/24: Protected areas. Eighth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Curitiba, Brazil, 20–31 March 2006. Available at <http://www.cbd.int/doc/decisions/cop-08/cop-08-dec-24-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2008. Decision IX/18: Protected areas. Ninth meeting of the Conference of the Parties to the Convention on Biological Diversity, Bonn, Germany, 19–30 May 2008. Available at <http://www.cbd.int/doc/decisions/cop-09/cop-09-dec-18-en.pdf>.
- Convention on Biological Diversity (CBD) COP. 2008. Decision IX/20: Marine and coastal biodiversity. Ninth meeting of the Conference of the Parties to the Convention on Biological Diversity, Bonn, Germany, 19–30 May 2008. Available at <http://www.cbd.int/doc/decisions/cop-09/cop-09-dec-20-en.pdf>.
- Convention on Migratory Species (CMS) COP. 2005. Resolution 8.18: Integration of Migratory Species into National Biodiversity Strategies and Action Plans and into On-Going and Future Programmes of Work Under the Convention on Biological Diversity. Eighth Meeting of the Conference of the Parties to CMS, 20–25 November 2005, Nairobi. Available at http://www.cms.int/bodies/COP/cop8/documents/proceedings/pdf/eng/CP8Res_8_18_Integration_MigratorySpecies_Natl_Biodiversity_E.pdf.
- International Maritime Organization (IMO). 2001. Resolution A.927(22): Guidelines for the designation of Special Areas under MARPOL 73/78 and Guidelines for the identification and designation of Particularly Sensitive Sea Areas. IMO 22nd Assembly, 19–30 November 2001. Available at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D10469/927.pdf.
- International Maritime Organization (IMO). 2005. Resolution A.982(24): Revised guidelines for the identification and designation of particularly sensitive sea areas. IMO 24th Assembly, 21 November–2 December 2005. Available at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D25322/A982%2824%29.pdf.

- IUCN General Assembly (GA). 1994. Resolution 19.4: National Parks and Protected Areas. 19th Session of the General Assembly of IUCN, Buenos Aires, Argentina, 17–26 January 1994. Available at http://cmsdata.iucn.org/downloads/resolutions_recommendation_en.pdf.
- IUCN General Assembly (GA). 1988. Resolution 17.38: Protection of the Coastal and Marine Environment. 17th Session of the General Assembly of IUCN, San Jose, Costa Rica, 1–10 February 1988. Available at http://cmsdata.iucn.org/downloads/resolutions_recommendation_en.pdf.
- IUCN World Conservation Congress (WCC). 2005. Resolution 3.022: Endorsement of the Earth Charter. Third IUCN World Conservation Congress, Bangkok, Thailand, 17–25 November 2004. Gland, Switzerland and Cambridge, UK: IUCN. Available at http://cmsdata.iucn.org/downloads/wcc_res_rec_eng.pdf.
- IUCN World Conservation Congress (WCC). 2005. Resolution 3.018: Mobile peoples and conservation. Third IUCN World Conservation Congress, Bangkok, Thailand, 17–25 November 2004. Gland, Switzerland and Cambridge, UK: IUCN. Available at http://cmsdata.iucn.org/downloads/wcc_res_rec_eng.pdf.
- IUCN World Conservation Congress (WCC). 2009. Resolution 4.049: Supporting Indigenous Conservation Territories and other Indigenous Peoples' and Community Conservation Areas. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress (WCC). 2009. Resolution 4.052: Implementing the United Nations Declaration on the Rights of Indigenous Peoples. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress (WCC). 2009. Resolution 4.053: Mobile indigenous peoples and biodiversity conservation. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress (WCC). 2009. Resolution 4.072: Private protected areas and nature stewardship. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress (WCC). 2009. Resolution 4.087: Impacts of infrastructure and extractive industries on protected areas. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress (WCC). 2009. Recommendation 4.123 Promotion of Category V and VI Protected Areas for biodiversity conservation. IUCN Fourth World Conservation Congress, Barcelona, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Parks Congress (WPC). 2004. The Durban Action Plan. (Revised Version, March 2004). Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/durbanactionen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.9: Integrated Landscape Management to Support Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.10: Policy Linkages between Relevant International Conventions and Programmes in Integrating Protected Areas in the Wider Landscape/Seascape. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.11: A Global Network to Support the Development of Transboundary Conservation Initiatives. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.16: Good Governance of Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.17: Recognising and Supporting a Diversity of Governance Types for Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.22: Building a Global System of Marine and Coastal Protected Area Networks. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.25: Co-management of Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.26: Community Conserved Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress (WPC). 2003. Recommendation V.27: Mobile Indigenous Peoples and Conservation. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.

- OSPAR Commission. 2003. Recommendation 2003/3 on a Network of Marine Protected Areas. Available at http://www.ospar.org/v_measures/get_page.asp?v0=or03-03e.doc&v1=4.
- Ramsar Convention COP. 1990. Resolution 4.4: Implementation of Article 5 of the Convention. 4th Meeting of the Conference of the Contracting Parties, Montreux, Switzerland, 27 June–4 July 1990. Available at http://www.ramsar.org/pdf/res/key_res_4.4e.pdf.
- Ramsar Convention COP. 1999. Resolution VII.8: Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands. 7th meeting of the Conference of the Contracting Parties to the Ramsar Convention, San José, Costa Rica, 10–18 May 1999. Available at http://www.ramsar.org/pdf/res/key_res_vii.08e.pdf.
- Ramsar Convention COP. 1999. Resolution VII.19: Guidelines for international cooperation under the Ramsar Convention. 7th meeting of the Conference of the Contracting Parties to the Ramsar Convention, San José, Costa Rica, 10–18 May 1999. Available at http://www.ramsar.org/pdf/res/key_res_vii.19e.pdf.
- Ramsar Convention COP. 2002. Resolution VIII.4: Wetland issues in Integrated Coastal Zone Management (ICZM). 8th meeting of the Conference of the Contracting Parties to the Ramsar Convention, Valencia, Spain, 18–26 November 2002. Available at http://www.ramsar.org/pdf/res/key_res_viii_04_e.pdf.
- Ramsar Convention COP. 2002. Resolution VIII.14: New Guidelines for management planning for Ramsar sites and other wetlands. 8th meeting of the Conference of the Contracting Parties to the Ramsar Convention, Valencia, Spain, 18–26 November 2002. Available at http://www.ramsar.org/pdf/res/key_res_viii_14_e.pdf.
- Ramsar Convention COP. 2005. Resolution IX.22: Ramsar sites and systems of protected areas. Resolutions of the 9th Meeting of the Conference of the Parties (Kampala, Uganda, 8–15 November 2005). Available at http://www.ramsar.org/pdf/res/key_res_ix_22_e.pdf.
- United Nations Economic and Social Council (ECOSOC). 2000. Resolution 2000/35: Report on the fourth session of the Intergovernmental Forum on Forests. Resumed substantive session of 2000, New York, 18 and 30 October and 22 November 2000. Available at http://www.un.org/esa/forests/pdf/2000_35_E.pdf.
- United Nations Economic and Social Council (ECOSOC). 2007. Resolution 2007/40: Non-legally binding instrument on all types of forests. United Nations Forum on Forests, Seventh Session, New York, 16–27 April 2007. Available at http://www.daff.gov.au/_data/assets/pdf_file/0018/1141092/non-legally-binding-instrument.pdf.
- United Nations General Assembly (UN GA). 1983. Resolution 38/161: Process of preparation of the Environmental Perspective to the Year 2000 and Beyond. Adopted by the United Nations General Assembly 38th session, 19 December 1983. Available at <http://www.un-documents.net/a38r161.htm>.

Websites

- Aarhus Convention, <http://www.unece.org/env/pp/contentofaarhus.htm>.
- Alpine Convention, http://www.alpconv.org/home/index_en.
- BioSoc: The Biodiversity and Society Bulletin, <http://povertyandconservation.info/en/biosoc.php>.
- Central American Commission on Environment and Development, <http://www.ccad.ws>.
- Common Wadden Sea Secretariat, <http://www.waddensea-secretariat.org>.
- Conservation International. Biodiversity Hotspots, Mediterranean Basin, <http://www.biodiversityhotspots.org/xp/hotspots/mediterranean/Pages/default.aspx>.
- Convention on Biological Diversity, <http://www.cbd.int>.
- . Biological Diversity and Tourism, <http://www.cbd.int/tourism>.
- Convention on Migratory Species, <http://www.cms.int>.
- Coral Reef InitiativeS for the Pacific, <http://www.crisonline.net>.
- Council of Europe, European Landscape Convention, http://www.coe.int/t/dg4/cultureheritage/heritage/landscape/default_EN.asp.
- . Online bookshop, <http://book.coe.int/EN>.
- Earth Charter Initiative, <http://www.earthcharterinaction.org/content>.
- ECOLEX, <http://www.ecolex.org>.
- European Commission, Environment, Nature and Biodiversity, http://ec.europa.eu/environment/nature/index_en.htm.
- FAOLEX, <http://faolex.fao.org/faolex>.
- Global Transboundary Protected Areas Network, <http://www.tbpa.net/index.html>.
- International Maritime Organization, <http://www.imo.org>.
- IUCN Commission on Environmental Law, <http://www.iucn.org/about/union/commissions/cel>.
- IUCN Commission on Environmental, Economic and Social Policy, <http://www.iucn.org/about/union/commissions/ceesp>.

- IUCN Countdown 2010, <http://www.countdown2010.net>.
- IUCN Environmental Law Programme, http://www.iucn.org/about/work/programmes/environmental_law.
- IUCN Global Marine Programme, <http://www.iucn.org/about/work/programmes/marine>.
- . Marine News, http://www.iucn.org/about/work/programmes/marine/gmp_newsletter.
- IUCN Red List of Threatened Species, <http://www.iucnredlist.org>.
- IUCN Social Policy, http://www.iucn.org/about/work/programmes/social_policy.
- IUCN Strategic Direction on Governance, Communities, Equity, and Livelihood Rights in Relation to Protected Areas, <http://www.iucn.org/about/union/commissions/ceesp/wg/tilcepa/index.cfm>.
- IUCN World Commission on Protected Areas, <http://www.iucn.org/about/union/commissions/wcpa>.
- . Global Transboundary Protected Areas Task Force, <http://www.tbpa.net>.
- Land Trust Alliance, <http://www.landtrustalliance.org>.
- Large Marine Ecosystems of the World, <http://www.lme.noaa.gov>.
- LMMA Network, <http://www.lmmanetwork.org>.
- Marine Ecosystems and Management, <http://depts.washington.edu/meam>.
- MPA News, <http://depts.washington.edu/mpanews>.
- OSPAR Commission, <http://www.ospar.org/welcome.asp?menu=0>.
- Parks Magazine, http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_parksmag.
- Ramsar Convention on Wetlands, <http://www.ramsar.org>.
- Southern African Development Community, <http://www.sadc.int>.
- Sulu-Sulawesi Marine Ecoregion, <http://www.sulusulawesi.net>.
- The Nature Conservancy, <http://nature.org>.
- Trustees of Reservations, <http://www.thetrustees.org>.
- United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, <http://www.un-redd.org/Home/tabid/565/language/en-US/Default.aspx>.
- United Nations Economic and Social Council, <http://www.un.org/en/ecosoc>.
- United Nations Educational, Scientific and Cultural Organisation, <http://www.unesco.org/new/en/unesco>.
- . Man and the Biosphere Programme, http://portal.unesco.org/science/en/ev.php-URL_ID=6393&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- . People, Biodiversity and Ecology, <http://www.unesco.org/mab/BRs.shtml>.
- . Sustainable Tourism Programme, <http://whc.unesco.org/en/sustainabletourism>.
- . World Heritage List <http://whc.unesco.org/en/list>.
- . World Heritage List, The Wadden Sea, <http://whc.unesco.org/en/list/1314>.
- . World Network of Biosphere Reserves http://portal.unesco.org/science/en/ev.php-URL_ID=6433&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- United Nations Environment Programme, Regional Seas Programme, <http://www.unep.org/regionalseas/default.asp>.
- United Nations Environment Programme-World Conservation Monitoring Centre, <http://www.unep-UNEP-WCMC.org>.
- . United Nations List of Protected Areas, http://www.unep-wcmc.org/protected_areas/UN_list.
- United Nations Forum on Forests, <http://www.un.org/esa/forests/about.html>.
- World Database on Protected Areas, <http://www.wdpa.org>.

Thematic bibliography

A. General and cross-cutting

- Bakarr, M., and M. Lockwood. Establishing Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.), *Managing Protected Areas: A Global Guide*. London: Earthscan.
- Barber, C.V., K.R. Miller and M. Boness (eds.). 2004. Securing Protected Areas in the Face of Global Change: Issues and Strategies. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2004-072.pdf>.
- Benidickson, J. 2010. Legal Framework for Protected Areas: Canada. Gland, Switzerland: IUCN.
- Benidickson, J. 2010. Legal Framework for Protected Areas: Ontario (Canada). Gland, Switzerland: IUCN.
- Bern Convention Standing Committee. 1989. Recommendation No. 16 (1989) of the standing committee on areas of special conservation interest. Adopted by the Standing Committee on 9 June 1989. Online, <https://wcd.coe.int/ViewDoc.jsp?id=1485727&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864>.
- Bern Convention Standing Committee. 1989. Recommendation No. 16 (1989) of the standing committee on areas of special conservation interest. Adopted by the Standing Committee on 9 June 1989. Online, <https://wcd.coe.int/ViewDoc.jsp?id=1485727&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864>.
- Bern Convention Standing Committee. 1998. Resolution No. 5 (1998) concerning the rules for the Network of Areas of Special Conservation Interest (Emerald Network). Adopted by the Standing Committee on 4 December 1998. Online, <https://wcd.coe.int/ViewDoc.jsp?id=1475223&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864>.
- Bishop, K., N. Dudley, A. Phillips and S. Stolton. 2004. Speaking a Common Language: The Uses and Performance of the IUCN System of Management Categories for Protected Areas. Cardiff: Cardiff University, IUCN and UNEP-WCMC. Available at <http://data.iucn.org/dbtw-wpd/edocs/2004-049.pdf>.
- Boer, B., and S. Gruber. 2010. Legal Framework for Protected Areas: Australia. Gland, Switzerland: IUCN.
- Boer, B., and S. Gruber. 2010. Legal Framework for Protected Areas: New South Wales (Australia). Gland, Switzerland: IUCN.
- Boitani, L., and C. Rondinini. 2008. From Management Objectives to Biodiversity Objectives. In N. Dudley and S. Stolton (eds.), *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- British Ecological Society. 2009. Recognizing the Value of Protected Areas. Chapter 8. *TEEB—The Economics of Ecosystems and Biodiversity for National and International Policy Makers*. Available at <http://www.teebweb.org/LinkClick.aspx?fileticket=jYXV-t7xjLE%3d&tabid=1019&language=en-US>.
- Chape, S., J. Harrison, M. Spalding and I. Lysenko. 2005. Measuring the Extent and Effectiveness of Protected Areas as an Indicator for Meeting Global Biodiversity Targets. *Philosophical Transactions of the Royal Society Bulletin* 360: 443–455. Available at http://www.unep-wcmc.org/resources/publications/GlobalTargets/Measuring_PA_Extent.pdf.
- Chape, S., S. Blyth, L. Fish, P. Fox and M. Spalding (Compilers). 2003. 2003 United Nations List of Protected Areas. Gland and Cambridge: IUCN and Cambridge: UNEP-WCMC. Available at <http://www.unep.org/pdf/un-list-protected-areas.pdf>.
- Clarke, P., I. Millar and K. Solberger. 2008. South Pacific Regional Environmental Law Capacity Building Project. Scoping Report. Gland: IUCN.
- Coad L., N.D. Burgess, B. Bomhard and C. Besancon. 2009. Progress Towards the Convention on Biological Diversity's 2010 and 2012 Targets for Protected Area Coverage. Technical report for IUCN international workshop, "Looking to the Future of the CBD Programme of Work on Protected Areas", Jeju Island, Republic of Korea, 14–17 September 2009. Cambridge: UNEP-WCMC. Available at http://www.unep-wcmc.org/protected_areas/pdf/Towardprogress.pdf.
- De Klemm, C. 1990. *Wild Plant Conservation and the Law*. IUCN Environmental Policy and Law Paper No. 24. Gland and Cambridge: IUCN.
- De Klemm, C., and C. Shine. 1993. Biological Diversity Conservation and the Law: Legal Mechanisms for Conserving Species and Ecosystems. IUCN Environmental Policy and Law Paper No. 29. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-029.pdf>.
- Dudley, N., and S. Stolton (eds.). 2008. *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Dudley, N., S. Stolton, A. Belokurov, L. Krueger, N. Lopoukhine, K. MacKinnon, T. Sandwith and N. Sekhran (eds.). 2010. *Natural Solutions: Protected Areas Helping People Cope with Climate Change*. Gland, Washington, DC and New York: IUCN-WCPA, TNC, UNDP, WCS, The World Bank and WWF. Available at http://cmsdata.iucn.org/downloads/natural_solutions.pdf.

- Dudley, N., and J. Parish. 2006. Closing the Gap. Creating Ecologically Representative Protected Area Systems: A Guide to Conducting the Gap Assessments of Protected Area Systems for the Convention on Biological Diversity. Technical Series No. 24. Montreal: Secretariat of the Convention on Biological Diversity. Available at <http://www.cbd.int/doc/publications/cbd-ts-24.pdf>.
- Eagles, P., M. Bowman and Tao, T. 2001. Guidelines for Tourism in Parks and Protected Areas of East Asia. Gland and Cambridge: IUCN. Available at <http://www.ahs.uwaterloo.ca/~eagles/EastAsia.pdf>.
- Eagles, P., S. McCool and C. Haynes. 2002. Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. WCPA Best Practice Protected Area Guidelines Series No. 8. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-008.pdf>.
- Emerton, L., J. Bishop and L. Thomas. 2006. Sustainable Financing of Protected Areas: A Global Review of Challenges and Options. WCPA Best Practice Protected Area Guidelines Series No. 13. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-013.pdf>.
- Glowka, L. 1998. A Guide to Designing Legal Frameworks to Determine Access to Genetic Resources. Environmental Policy and Law Paper No. 34. Gland, Cambridge and Bonn: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-034.pdf>.
- Glowka, L. in collaboration with C. Shine, O.R. Santos, M. Farooque and L. Gündling. 1998. A Guide to Undertaking Biodiversity Legal and Institutional Profiles. Environmental Policy and Law Paper No. 35. Gland: IUCN.
- Glowka, L., F. Burhenne-Guilmin and H. Synge, in collaboration with J.A. McNeely and L. Gündling. 1994. A Guide to the Convention on Biological Diversity. Environmental Policy and Law Paper No. 30. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-no.030.pdf>.
- Guignier, A., and M. Prieur. 2010. Legal Framework for Protected Areas: France. Gland, Switzerland: IUCN.
- Hamilton, L., and L. McMillan. 2004. Guidelines for Planning and Managing Mountain Protected Areas. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2004-017.pdf>.
- Hannah, L. 2003. Protected Areas Management in a Changing Climate. In N.W.P. Munro, P. Dearden, T.B. Herman, K. Beazley and S. Bondrup-Nielsen (eds.). *Making Ecosystem Based Management Work: Connecting Managers and Researchers*. Proceedings of the Fifth International Conference on Science and Management of Protected Areas, 11–16 May 2003. Wolfville, Nova Scotia: SAMPAA. Available at <http://www.sampaa.org/>.
- Hockings, M., S. Stolton, F. Leverington, N. Dudley and J. Courrau. 2006. Evaluating Effectiveness: A Framework for Assessing Management Effectiveness of Protected Areas. 2nd edition. WCPA Best Practice Protected Area Guidelines Series No. 14. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-014.pdf>.
- Inamdar, A., and E. de Merode. 1999. Towards Financial Sustainability for Protected Areas: Learning From Business Approaches. Oxford: The Environment and Development Group. Available at http://www.conservationfinance.org/guide/guide/images/29_inamd.pdf.
- IUCN. 1994. Guidelines for Protected Area Management Categories. IUCN Commission on National Parks and Protected Areas with the assistance of the World Conservation Monitoring Centre. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/1994-007-En.pdf>.
- IUCN. 2006. An Introduction to the African Convention on the Conservation of Nature and Natural Resources. Second edition. IUCN Environmental Policy and Law Paper No. 56 Rev. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-056-rev.pdf>.
- IUCN. 2008. IUCN Red List Reveals World's Mammals in Crisis. Press release. October 6. Online, http://www.iucn.org/about/work/programmes/species/red_list/?1695/3.
- IUCN. 2010. Members database. Online, http://www.iucn.org/about/union/members/who_members/members_database/.
- IUCN General Assembly. 1994. Resolution 19.4: National Parks and Protected Areas. 19th Session of the General Assembly of IUCN, Buenos Aires, Argentina, 17–26 January 1994. Available at http://cmsdata.iucn.org/downloads/resolutions_recommendation_en.pdf.
- IUCN World Commission on Protected Areas Financing Protected Areas Task Force, in collaboration with the IUCN Economics Unit. 2000. Financing Protected Areas: Guidelines for Protected Area Managers. IUCN-WCPA Best Practice Protected Area Guidelines Series No. 5. Gland and Cambridge: IUCN. Available at: <http://data.iucn.org/dbtw-wpd/edocs/PAG-005.pdf>.
- IUCN World Commission on Protected Areas. 1999. *Parks for Biodiversity: Policy Guidance based on experience in ACP countries*. Brussels: European Commission and Gland: IUCN. Available at <http://cmsdata.iucn.org/downloads/parksforbiodiversity.pdf>.
- IUCN World Commission on Protected Areas. 2007. Guidelines for Applying the Precautionary Principle to Biodiversity Conservation and Natural Resource Management. As approved by the 67th meeting of the IUCN Council, 14–16 May 2007. Available at http://cmsdata.iucn.org/downloads/In250507_ppguidelines.pdf.
- IUCN World Conservation Congress. 2005. Resolution 3.022: Endorsement of the Earth Charter. Third IUCN World Conservation Congress, Bangkok, Thailand, 17–25 November 2004. Gland, Switzerland and Cambridge, UK: IUCN. Available at http://cmsdata.iucn.org/downloads/wcc_res_rec_eng.pdf.

- IUCN World Conservation Congress. 2009. Resolution 4.087: Impacts of infrastructure and extractive industries on protected areas. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Parks Congress. 2003. Recommendation V.10: Policy Linkages between Relevant International Conventions and Programmes in Integrating Protected Areas in the Wider Landscape/Seascape. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.9: Integrated Landscape Management to Support Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2004. The Durban Action Plan. (Revised Version, March 2004). Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/durbanactionen.pdf>.
- Kulshreshtha, S., and M. Johnston. 2004. Economic Value of Stored Carbon in Protected Areas: A Case Study of Canadian National Parks. Proceedings of the Fifth International Conference on Science and Management of Protected Areas, Wolfville, Nova Scotia, Canada, 11–16 May 2003. Available at http://www.sampaa.org/publications/conference-proceedings-1991-2000/2003-proceedings/economic-analysis-protected-areas/Kulshreshtha%20and%20Johnston%202004.pdf/at_download/file.
- La Viña, A.G.M., J.L. Kho and M.J. Caleda. 2010. Legal Framework for Protected Areas: Philippines. Gland, Switzerland: IUCN.
- Lausche, B. 1980. Guidelines for Protected Areas Legislation. IUCN Environmental Policy and Law Paper No. 16. Gland: IUCN and Nairobi: UNEP. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-016.pdf>.
- Lockwood, M., G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan
- Mackenzie, R., F. Burhenne-Guilmin, A.G.M. La Viña and J.D. Werksman. 2003. An Explanatory Guide to the Cartagena Protocol on Biosafety. IUCN Environmental Policy and Law Paper No. 46. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-046.pdf>.
- Margules, C.R., and R.L. Pressey. 2000. Systematic Conservation Planning. *Nature* 405: 243–253. Available at http://courses.washington.edu/esrm200/Margules_Pressey_Conservation_Planning_Nature_2000.pdf.
- McNeely, J.A. 2005. Protected Areas in 2023: Scenarios for an Uncertain Future. *The George Wright Forum* 22(1): 61–74. Available at <http://www.georgewright.org/221mcneely.pdf>.
- Miller, K., and L. Hamilton. 1999. Editorial. *Parks* 9(3). Available at http://cmsdata.iucn.org/downloads/parks_oct99.pdf.
- Miller, K., and H. Kim. 2010. Ecological Corridors: Legal Framework for the Baekdu Daegan Mountain System (South Korea). Gland, Switzerland: IUCN.
- Moore, P., and P. Shadie. 2007. Connectivity Conservation: International Experience in Planning, Establishment and Management of Biodiversity Corridors. Background paper. IUCN Regional Environmental Law Programme, Asia and Regional Protected Areas Programme, Asia. Unpublished. Available at http://cmsdata.iucn.org/downloads/070723_bci_international_report_final.pdf.
- Naughton-Treves, L., M.B. Holland and K. Brandon. 2005. The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods. *Annual Review of Environment and Resources* 30: 219–252.
- Parks. 2004. Protected Area Categories. Vol. 14, No. 3. Available at http://cmsdata.iucn.org/downloads/14_3lowres.pdf.
- Parks. 2008. Durban +5. Vol. 17, No. 2. Available at http://cmsdata.iucn.org/downloads/parks_17_2_web.pdf.
- Paterson, A.R. 2010. Legal Framework for Protected Areas: South Africa. Gland, Switzerland: IUCN.
- Patry, M. 2008. World Heritage and IUCN Categories. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Pomeroy, R.S., J.E. Parks and L.M. Watson. 2004. *How is Your MPA Doing? A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Area Management Effectiveness*. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAPS-012.pdf>.
- Ramsar Convention COP. 2005. Resolution IX.22: Ramsar sites and systems of protected areas. Resolutions of the 9th Meeting of the Conference of the Parties, Kampala, Uganda, 8–15 November 2005. Available at http://www.ramsar.org/pdf/res/key_res_ix_22_e.pdf.
- Ramsar Secretariat. 2006. The Ramsar Convention Manual: A Guide to the Convention on Wetlands (Ramsar, Iran, 1971). 4th edition. Gland, Switzerland: Ramsar Convention Secretariat. Available at http://www.ramsar.org/pdf/lib/lib_manual2006e.pdf.
- Ramsar Secretariat. 2008. Wetlands of International Importance and the IUCN System of Protected Area Management Categories. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.

- Redford, K.H., and E. Fearn (eds.). 2007. Protected Areas and Human Displacement: A Conservation Perspective. WCS Working Paper No. 29. New York: Wildlife Conservation Society. Available at <http://www2.fiu.edu/~brayd/wcswp29.pdf>.
- Rohter, L. 2004. Preserving an Old-Forest Wilderness at the Ends of the Earth. *The New York Times*, September 14. Online, <http://www.nytimes.com/2004/09/14/science/14fueg.html>.
- Sandwith, T., and M. Lockwood. 2006. Linking the Landscape. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.
- Saunders, S., T. Easley and S. Farver. 2009. National Parks in Peril: The Threats of Climate Disruption. Denver, CO: Rocky Mountain Climate Organization and Washington, DC: Natural Resources Defense Council. Available at <http://www.rockymountainclimate.org/website%20pictures/National-Parks-In-Peril-final.pdf>.
- Scanlon, J., and F. Burhenne-Guilmin (eds.). 2004. International Environmental Governance: An International Regime for Protected Areas. IUCN Environmental Policy and Law Paper No. 49. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-049.pdf>.
- Schliep, R., M. Bertzky, M. Hirschnitz and S. Stoll-Kleemann. 2008. Changing Climate in Protected Areas? Risk Perception of Climate Change by Biosphere Reserve Managers. *GAIA* 17(1): 116–124. Available at <http://www.ingentaconnect.com/content/oekom/gaia/2008/0000017/A00101s1/art00009>.
- Secretariat of the Convention on Biological Diversity. 2004. Biodiversity Issues for Consideration in the Planning, Establishment and Management of Protected Area Sites and Networks. CBD Technical Series No. 15. Montreal: SCBD. Available at: <http://www.cbd.int/doc/publications/cbd-ts-15.pdf>.
- Secretariat of the Convention on Biological Diversity. 2007. Managing Tourism and Biodiversity: User's Manual on the CBD Guidelines on Biodiversity and Tourism Development. Available at <http://www.cbd.int/doc/programmes/tourism/tourism-manual-en.pdf>.
- Shine, C., and C. de Klemm. 1999. Wetlands, Water and the Law: Using Law to Advance Wetland Conservation and Wise Use. IUCN Environmental Policy and Law Paper No. 38. Gland, Cambridge and Bonn: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-038.pdf>.
- Solano, P. 2010. Legal Framework for Protected Areas: Peru. Gland, Switzerland: IUCN.
- Stec, S., and S. Casey-Lefkowitz. 2000. The Aarhus Convention: An Implementation Guide. UN Economic Commission For Europe. New York and Geneva: UN. Available at <http://www.unece.org/env/pp/acig.pdf>.
- Tarasofsky, R.G. 1999. Assessing the International Forest Regime. IUCN Environmental Policy and Law Paper No. 37. Gland, Cambridge and Bonn: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-037.pdf>.
- Thomas, L., and J. Middleton. 2003. Guidelines for Management Planning of Protected Areas. WCPA Best Practice Protected Area Guidelines Series No. 10. Gland and Cambridge: IUCN. Available at <http://intranet.catie.ac.cr/intranet/posgrado/Manejo%20Areas%20Protegidas/Documentos/Guide%20line%20management%20planning.pdf>.
- Thompson, I., B. Mackey, S. McNulty and A. Mosseler. 2009. Forest Resilience, Biodiversity, and Climate Change: A Synthesis of the Biodiversity/Resilience/Stability Relationship in Forest Ecosystems. CBD Technical Series No. 43. Montreal: Secretariat of the Convention on Biological Diversity. Available at <http://www.cbd.int/doc/publications/cbd-ts-43-en.pdf>.
- Tu, M. 2009. Assessing and Managing Invasive Species within Protected Areas. Protected Area Quick Guide Series. Arlington, VA: The Nature Conservancy. Available at <http://www.gisp.org/whatsnew/docs/IAS&protectedareas.pdf>.
- United Nations. 1992. Agenda 21: The United Nations Programme of Action From Rio. Online, <http://www.un.org/esa/dsd/agenda21>.
- United Nations. 2002. Plan of Implementation of the World Summit on Sustainable Development. Resolution 2. Adopted at the 17th plenary meeting, on 4 September 2002. World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002. New York: UN. Available at http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf.
- United Nations. 2003. Indicators for Monitoring the Millennium Development Goals: Definitions Rationale Concepts and Sources. New York: UN. Available at <http://mdgs.un.org/unsd/mdg/Resources/Attach/Indicators/HandbookEnglish.pdf>.
- United Nations. 2007. The Millennium Development Goals Report: 2007. New York: UN. Available at <http://www.un.org/millenniumgoals/pdf/mdg2007.pdf>.
- United Nations. 2008. The Millennium Development Goals Report: 2008. New York: UN. Available at <http://www.un.org/millenniumgoals/pdf/The%20Millennium%20Development%20Goals%20Report%202008.pdf>.
- United Nations Economic and Social Council. 2000. Resolution 2000/35: Report on the fourth session of the Intergovernmental Forum on Forests. Resumed substantive session of 2000, New York, 18 and 30 October and 22 November 2000. Available at http://www.un.org/esa/forests/pdf/2000_35_E.pdf.
- United Nations Economic and Social Council. 2007. Resolution 2007/40: Non-legally binding instrument on all types of forests. United Nations Forum on Forests, Seventh Session, New York, 16–27 April 2007. Available at http://www.daff.gov.au/_data/assets/pdf_file/0018/1141092/non-legally-binding-instrument.pdf.
- United Nations Educational, Scientific and Cultural Organisation. 2008. Madrid Action Plan for Biosphere Reserves (2008–2013). Available at <http://unesdoc.unesco.org/images/0016/001633/163301e.pdf>.

- United Nations Educational, Scientific and Cultural Organisation. 2008. Operational Guidelines for the Implementation of the World Heritage Convention. Intergovernmental Committee for the Protection of the World Cultural And Natural Heritage. Paris: UNESCO World Heritage Centre. Available at <http://whc.unesco.org/archive/opguide08-en.pdf>.
- United Nations Environment Programme. 2010. Environmental Law: Report of the Executive Director. Draft guidelines for the development of national legislation on access to information, public participation and access to justice in environmental matters. Governing Council of the United Nations Environment Programme (UNEP/GCSS.XI/8). Available at <http://www.unep.org/gc/gcss-x/download.asp?ID=1204>.
- United Nations Environment Programme World Conservation Monitoring Centre. 2007. Global List of Transboundary Protected Areas. Available at http://www.tbpa.net/docs/pdfs/2007_UNEP-WCMC_Global_List_of_Transboundary_Protected%20Areas.pdf.
- United Nations Environment Programme World Conservation Monitoring Centre. 2010. Protected Planet: The Protected Areas Portal. Data Standards for the World Database on Protected Areas. Cambridge: UNEP-WCMC. Available at <http://www.wdpa.org/PDF/Wdpa%20Data%20Standard.pdf>.
- United Nations General Assembly. 1983. Resolution 38/161: Process of preparation of the Environmental Perspective to the Year 2000 and Beyond. Adopted by the United Nations General Assembly 38th session, 19 December 1983. Available at <http://www.un-documents.net/a38r161.htm>.
- United States Agency for International Development. 2005. Biodiversity Conservation: A Guide for USAID Staff and Partners. Washington, DC: USAID. Available at http://pdf.usaid.gov/pdf_docs/pnade258.pdf.
- Welch, D. 2005. What Should Protected Areas Managers Do in the Face of Climate Change. *The George Wright Forum* 22(1): 75–93. Available at <http://www.georgewright.org/221welch.pdf>.
- Wild, R., and C. McLeod (eds.). 2008. Sacred Natural Sites: Guidelines for Protected Area Managers. WCPA Best Practice Protected Area Guidelines Series No. 16. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-016.pdf>.
- Wolfrum, R., and R. Grote (eds.). 1971. *Constitutions of the Countries of the World*. (Loose-leaf.) New York: Oxford University Press.
- Worboys, G.L., C. Winkler and M. Lockwood. 2006. Threats to Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). *Managing Protected Areas: A Global Guide*. London: Earthscan.
- Worboys, G.L., M. Lockwood and T. De Lacy. 2005. *Protected Area Management: Principles and Practice*. Second Edition. Oxford: Oxford University Press.
- Worboys, G.L., W.L. Francis and M. Lockwood. 2010. *Connectivity Conservation Management: A Global Guide*. London: Earthscan.
- World Bank. 2007. Reducing Threats to Protected Areas: Lessons from the Field. Joint UNDP and World Bank GEF Lessons Learned Study. Washington, DC: World Bank. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/06/11/000333038_20080611040839/Rendered/PDF/441620WP0BOX321AN10110200701PUBLIC1.pdf.
- World Commission on Environment and Development. 1987. *Our Common Future*. Oxford: Oxford University Press.
- World Resources Institute. 2005. *Ecosystems and Human Well-Being: Biodiversity Synthesis*. Washington, DC: Island Press.

B. Governance

- African Development Bank. 2008. Governance Strategic Directions and Action Plan: GAP 2008–2012. Governance, Economic and Financial Management Department. Tunis Belvédère: AfDB. Available at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/7000017_EN_OSGE%20anglais%20OK.pdf.
- African Development Bank. 2010. Frequently asked questions. What is governance? Online, <http://www.afdb.org/en/topics-sectors/sectors/economic-financial-governance/frequently-asked-questions>.
- Alldrich, R., and J. Wyerman. 2006. 2005 National Land Trust Census Report. Washington, DC: Land Trust Alliance. Available at <http://www.landtrustalliance.org/about-us/land-trust-census/2005-report.pdf>.
- Asian Development Bank. 1999. Governance: Sound Development Management. Manila: ADB. Available at <http://www.adb.org/documents/policies/governance/govpolicy.pdf>.
- Abrams, P., G. Borrini-Feyerabend, J. Gardner and P. Heylings. 2003. Evaluating Governance: A Handbook to Accompany a Participatory Process for a Protected Area. IUCN CEESP/TILCEPA and WCPA. Draft for field testing.
- Bassi, M. 2006. Community conserved areas in the Horn of Africa. *Parks* 16(1): 28–34. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Beltrán, J. (ed.) (2000). Indigenous and Traditional Peoples and Protected Areas: Principles, Guidelines and Case Studies. IUCN-WCPA Best Practice Protected Area Guidelines Series No. 4. Gland and Cambridge: IUCN and WWF International.

- Bernstein, J., and B.A. Mitchell. 2005. Land Trusts, Private Reserves and Conservation Easements in the United States. *Parks* 15(2): 48–60. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Borrini-Feyerabend, G. 1996. Collaborative Management of Protected Areas: Tailoring the Approach to the Context. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/1996-032.pdf>.
- Borrini-Feyerabend, G. 2004. Governance of Protected Areas, Participation and Equity. In Secretariat of the Convention on Biological Diversity (SCBD). Biodiversity issues for consideration in the planning, establishment and management of protected area sites and networks. CBD Technical Series No. 15. Montreal: SCBD. Available at: <http://www.cbd.int/doc/publications/cbd-ts-15.pdf>.
- Borrini-Feyerabend, G., et al. 2010. Bio-cultural diversity conserved by indigenous peoples and local communities—examples and analysis. Tehran: ICCA Consortium and Cenesta for GEF SGP, GTZ, IIED and IUCN/CEESP. Available at <http://www.iccaforum.org/images/stories/Database/ea%20icca%20english.pdf>.
- Brewer, R. 2003. Conservancy: The Land Trust Movement in America. Lebanon, NH: Dartmouth College Press.
- Brown, J., N. Mitchell and M. Beresford. 2005. The Protected Landscape Approach: Linking Nature, Culture and Community. Gland and Cambridge: IUCN.
- Carter, E., W.M. Adams and J. Hutton. 2008. Private Protected Areas: Management Regimes, Tenure Arrangements and Protected Area Categorization in East Africa. *Oryx* 42: 177–186. Fauna and Flora International, Cambridge University Press.
- Chung, B. 1999. Community-Based Land Use Planning in Conservation Areas: Lessons from Local Participatory Processes that Seek to Balance Economic Uses with Ecosystem Protection. América Verde Training Manual No. 3. The Nature Conservancy.
- Endicott, E. (ed.). 1993. Land Conservation through Public/Private Partnerships. Lincoln Institute of Land Policy. Washington, DC: Island Press.
- Environmental Law Institute. 2003. Legal Tools and Incentives for Private Lands Conservation in Latin America: Building Models for Success. Washington, DC: ELI. Available at <http://elystore.org/Data/products/d13-10a.pdf>.
- Fairfax, S., and D. Guenzler. 2001. Conservation Trusts. Lawrence: University Press of Kansas.
- Farrier, D., and M. Adams. 2010. Indigenous/government co-management of protected areas: Booderee National Park and the National Framework in Australia. Gland, Switzerland: IUCN.
- Figgis, P. 2004. Conservation on Private Lands: the Australian Experience. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAPS-013.pdf>.
- Figgis, P., D. Humann and M. Looker. 2005. Conservation on Private Land in Australia. *Parks* 15(2): 19–29. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Fisher, R.J., S. Maginnis, W.J. Jackson, E. Barrow and S. Jeanrenaud. 2005. Poverty and Conservation: Landscapes, People and Power. IUCN Forest Conservation Programme, Landscapes and Livelihoods Series No. 2. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/FR-LL-002.pdf>.
- Galvin, M., and T. Haller (eds.). 2008. People, Protected Areas and Global Change: Participatory Conservation in Latin America, Africa, Asia and Europe. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern. Vol. 3. Bern: Geographica Bernensia. Available at http://www.nccr-north-south.unibe.ch/publications/Infosystem/On-line%20Dokumente/Upload/Galvin_Haller_NCCR_People_Protected_Areas_2008.pdf.
- Govan, H., A. Tawake, K. Tabunakawai, A. Jenkins, A. Lasgorceix, E. Techera, H. Tafea, J. Kinch, J. Feehely, P. Ifopo, R. Hills, S. Alefaio, S. Meo, S. Troniak, S. Malimali, S. George, T. Tauaefa and T. Obed. 2009. Community Conserved Areas: A Review of Status and Needs in Melanesia and Polynesia. ICCA regional review for CENESTA/TILCEPA/TGER/IUCN/GEF-SGP. Available at http://cmsdata.iucn.org/downloads/melanesia_polynesia_regional_icca_review.pdf.
- Graham, J., B. Amos, T. Plumtre. 2003. Governance Principles for Protected Areas in the 21st Century. Paper for the Vth IUCN World Parks Congress, Durban, South Africa. Ottawa: Institute On Governance. Available at http://iog.ca/sites/iog/files/pa_governance2.pdf
- Gregory, D.D. 1972. The Easement as a Conservation Technique. Environmental Policy and Law Paper No. 1. IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/ELP-001.pdf>.
- Hanna, K.S., D.A. Clark and D.S. Slocombe (eds.). 2007. Transforming Parks and Protected Areas: Policy and Governance in a Changing World. New York: Routledge.
- Harman, Sir John. 2005. The Relationship Between Good Governance and Environmental Compliance and Enforcement. Seventh International Conference on Environmental Compliance and Enforcement, 9–15 April 2005. Conference Proceedings Volume 1. Available at http://www.inece.org/conference/7/vol1/04_Harman.pdf.
- Institute On Governance, in collaboration with Parks Canada. 2002. Governance Principles for Protected Areas in the 21st Century: A Discussion Paper. Ottawa: Institute on Governance. Available at http://iog.ca/sites/iog/files/PA_governance.pdf.
- IUCN. 2008. Governance of Natural Resources, Equity and Human Rights. Online, http://www.iucn.org/about/work/initiatives/sp_cprihome/sp_cpri_themes/_sp_cpri_natural_resources.

- IUCN. 2010. Our Approach: Governance. Online, http://iucn.org/about/work/global_programme/our_approach.
- IUCN Commission on Environmental, Economic and Social Policy. 2007. Conservation and Human Rights. Policy Matters 15. Available at <http://cmsdata.iucn.org/downloads/pm15.pdf>.
- IUCN Commission on Environmental, Economic and Social Policy. 2008. Implementing the CBD Programme of Work on Protected Areas: Governance as Key for Effective and Equitable Protected Area Systems. CEESP Briefing Note No. 8, February. Available at http://cmsdata.iucn.org/downloads/governance_of_protected_areas_for_cbd_pow_briefing_note_08_1.pdf.
- IUCN Commission on Environmental, Economic and Social Policy. 2008. Recognising and Supporting Indigenous and Community Conservation—Ideas and Experiences from the Grassroots. CEESP Briefing Note No. 9, September. Available at http://cmsdata.iucn.org/downloads/ceesp_briefing_note_9_iccas.pdf.
- IUCN World Conservation Congress. 2005. Resolution 3.018: Mobile peoples and conservation. Third IUCN World Conservation Congress, Bangkok, Thailand, 17–25 November 2004. Gland, Switzerland and Cambridge, UK: IUCN. Available at http://cmsdata.iucn.org/downloads/wcc_res_rec_eng.pdf.
- IUCN World Conservation Congress. 2009. Recommendation 4.123 Promotion of Category V and VI Protected Areas for biodiversity conservation. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress. 2009. Resolution 4.049: Supporting Indigenous Conservation Territories and other Indigenous Peoples' and Community Conservation Areas. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress. 2009. Resolution 4.052: Implementing the United Nations Declaration on the Rights of Indigenous Peoples. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress. 2009. Resolution 4.053: Mobile indigenous peoples and biodiversity conservation. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Conservation Congress. 2009. Resolution 4.072: Private protected areas and nature stewardship. IUCN Fourth World Conservation Congress, Barcelona, Spain, 5–14 October 2008. Available at http://cmsdata.iucn.org/downloads/wcc_4th_005_english.pdf.
- IUCN World Parks Congress. 2003. Recommendation V.16: Good Governance of Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.17: Recognising and Supporting a Diversity of Governance Types for Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.25: Co-management of Protected Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.26: Community Conserved Areas. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.27: Mobile Indigenous Peoples and Conservation. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- Jaireth, H., and D. Smyth (eds.). 2003. Innovative Governance: Indigenous Peoples, Local Communities and Protected Areas. New Delhi: Ane Books.
- Jones, B., S. Stolton and N. Dudley. 2005. Private protected areas in East and Southern Africa: Contributing to Biodiversity Conservation and Rural Development. Parks 15(2): 67–77. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Kothari, A. 2006. Collaboratively Managed Protected Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). Managing Protected Areas: A Global Guide. London: Earthscan.
- Kothari, A. 2006. Community Conserved Areas. In M. Lockwood, G. Worboys and A. Kothari (eds.). Managing Protected Areas: A Global Guide. London: Earthscan.
- Kothari, A. 2006. Community Conserved Areas: Towards Ecological and Livelihood Security. Parks 16(1): 3–13. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Kothari, A. 2006. Editorial. Parks 16(1): 1–2. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Krug, W. 2002. Private Supply of Protected Land in Southern Africa: A Review of Markets, Approaches, Barriers and Issues. Working Party on Global and Structural Policies, Working Group on Economic Aspects of Biodiversity. Paris: OECD. Available at [http://www.oecd.org/officialdocuments/displaydocumentpdf/?cote=env/epoc/gsp/bio\(2001\)9/final&doclanguage=en](http://www.oecd.org/officialdocuments/displaydocumentpdf/?cote=env/epoc/gsp/bio(2001)9/final&doclanguage=en).

- Land Trust Alliance. 2004. Land Trust Standards and Practices (Revised 2004). Washington, DC: Land Trust Alliance. Available at <http://www.landtrustalliance.org/learning/sp/lt-standards-practices07.pdf>.
- Land Trust Alliance. 2010. About Us: Leadership in Land Conservation. Online, <http://www.landtrustalliance.org/about-us>.
- Langholz, J.A., and W. Krug. 2004. New Forms of Biodiversity Governance: Non-State Actors and the Private Protected Area Action Plan. *Journal of International Wildlife Law and Policy* 7(1): 9–29. Available at http://www.earthlore.ca/clients/WPC/English/grfx/sessions/PDFs/session_2/Langholz.pdf.
- Langton, M., Z.M. Rhea and L. Palmer. 2005. Community-Oriented Protected Areas for Indigenous Peoples and Local Communities. *Journal of Political Ecology* 12: 23–50. Available at http://jpe.library.arizona.edu/volume_12/LangtonPalmer.pdf.
- Lorenzi, S., and G. Borrini-Feyerabend. 2010. Community Conserved Areas: Legal Framework for the Natural Park of the Ampezzo Dolomites (Italy). Gland, Switzerland: IUCN.
- Mitchell, B.A. 2005. Editorial. *Parks* 15(2): 1–5. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Mitchell, B.A. 2007. “Who’s Doing the Protecting in Protected Areas?” A Global Perspective on Protected Area Governance. *The George Wright Forum* 24(3): 81–91. Available at <http://www.georgewright.org/243mitchell.pdf>.
- Organisation for Economic Co-operation and Development. 2007. Glossary of Statistical Terms – Definition of governance. Online, <http://stats.oecd.org/glossary/detail.asp?ID=7236>.
- Ostrom, E., T. Dietz, N. Dolšák, P.C. Stern, S. Stovich and E.U. Weber (eds.). 2002. *The Drama of the Commons*. Committee on the Human Dimensions of Global Change. National Research Council. Washington, DC: National Academy Press.
- Oviedo, G. 2006. Community Conserved Areas in South America. *Parks* 16(1): 49–55. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Parks. 2005. Planning for the Unexpected. Vol. 15, No. 1. Available at http://cmsdata.iucn.org/downloads/parks_15_1.pdf.
- Parks. 2006. Community Conserved Areas. Vol. 16, No. 1. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Pathak, N. 2006. Community Conserved Areas in South Asia. *Parks* 16(1): 56–62. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Pathak, N., and A. Kothari. 2010. *Indigenous and Community Conserved Areas: The Legal Framework in India*. Gland, Switzerland: IUCN.
- Perrault, A., K. Herbertson and O.J. Lynch. 2007. Partnerships for Success in Protected Areas: The Public Interest and Local Community Rights to Prior Informed Consent (PIC). *Georgetown International Environmental Law Review* 19(3): 475–542.
- Phillips, A. 2002. Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes. WCPA Best Practice Protected Area Guidelines Series No. 9. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-009.pdf>.
- Rambaldi, D.M., R.V Fernandes and M.A.R. Schmidt. 2005. Private Protected Areas and their Key Role in the Conservation of the Atlantic Forest Biodiversity Hotspot, Brazil. *Parks* 15(2): 30–38. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Ramsar Convention COP. 1999. Resolution VII.8: Guidelines for establishing and strengthening local communities’ and indigenous people’s participation in the management of wetlands. 7th meeting of the Conference of the Contracting Parties to the Ramsar Convention, San José, Costa Rica, 10–18 May 1999. Available at http://www.ramsar.org/pdf/res/key_res_vii.08e.pdf.
- Secretariat of the Convention on Biological Diversity. 2004. Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities. CBD Guidelines Series. Montreal: Secretariat of the CBD. Available at <http://www.cbd.int/doc/publications/akwe-brochure-en.pdf>.
- Sims-Castley, R., G. Kerley, B. Geach and J. Langholz. 2005. Socio-Economic Significance of Ecotourism-Based Private Game Reserves in South Africa’s Eastern Cape Province. *Parks* 15(2): 6–18. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Smyth, D. 2006. Indigenous Protected Areas in Australia. *Parks* 16(1): 14–20. Available at http://cmsdata.iucn.org/downloads/parks_16_1_forweb.pdf.
- Soto Oyarzún, L. 2010. *Private Protected Areas: Legal Framework for Pumalin Park (Chile)*. Gland, Switzerland: IUCN.
- Trust For Sustainable Livelihoods. 2007. *Managing Protected Areas in Times of Change: Leadership in Governance*. Report of the workshop organized by WCPA-Caribbean and The Trust For Sustainable Livelihoods, 14–17 November 2006. Available at [http://www.sustrust.org/documents/Final%20Report%20Leadership%20in%20Governance%20Workshop%20May07%20\(1\).pdf](http://www.sustrust.org/documents/Final%20Report%20Leadership%20in%20Governance%20Workshop%20May07%20(1).pdf).

- United Nations Development Programme. 1997. Governance for Sustainable Human Development: A UNDP Policy Document. Online, <http://mirror.undp.org/magnet/policy>.
- United Nations Development Programme. 2007. Governance Indicators: A Users' Guide. Second Edition. Bureau for Development Policy, Democratic Governance Group. New York: UNDP. Available at http://www.undp.org/oslocentre/docs07/undp_users_guide_online_version.pdf.
- United Nations Economic and Social Commission for Asia and the Pacific. 2010. What is Good Governance? Online, <http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp>.
- United Nations Office of the High Commissioner for Human Rights. 2007. Good Governance Practices for the Protection of Human Rights. New York and Geneva: UN. Available at <http://www.ohchr.org/Documents/Publications/GoodGovernance.pdf>.
- World Alliance of Mobile Indigenous Peoples. 2009. About WAMIP. Online, http://www.wamip.org/index.php?option=com_content&view=article&id=56%3A-cenesta-in-brief&catid=2&Itemid=94&lang=en.
- World Bank. 2009. Governance Matters 2009. Worldwide Governance Indicators, 1996–2008. Online, <http://info.worldbank.org/governance/wgi/index.asp>.

C. Marine protected areas

- Arctic Council. 2009. Arctic Marine Shipping Assessment 2009 Report. Available at http://www.pame.is/images/stories/PDF_Files/AMSA_2009_Report_2nd_print.pdf.
- Belfiore, S., B. Cicin-Sain and C. Ehler (eds.). 2004. Incorporating Marine Protected Areas into Integrated Coastal and Ocean Management: Principles and Guidelines. Gland and Cambridge: IUCN. Available at http://www.uicn.fr/IMG/pdf/Incorporating_Marine_Protected_Areas_into_Integrated_Ocean_and_Coastal_Management-Principles_and_Guidelines.pdf.
- Abdulla, A., M. Gomei, E. Maison and C. Piante. 2008. Status of Marine Protected Areas in the Mediterranean Sea. Malaga: IUCN and France: WWF.
- Braz, J. 2002. Zoning the Oceans: Using the National Marine Sanctuaries Act and the Antiquities Act to Establish Marine Protected Areas and Marine Reserves in America. *Ecology Law Quarterly* 29: 71–129.
- Chevalier, C. 2004. Governance in the Mediterranean Sea: Legal Regime and Perspectives. IUCN Centre for Mediterranean Cooperation. Available at http://cmsdata.iucn.org/downloads/legalspects_en_1.pdf.
- De Fontaubert, A.C., D.R. Downes and T.S. Agardy. 1996. Biodiversity in the Seas: Implementing the Convention on Biological Diversity in Marine and Coastal Habitats. IUCN Environmental Policy and Law Paper No. 32. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-032.pdf>.
- Dotinga, H., and E.J. Molenaar. 2008. The Mid-Atlantic Ridge: A Case Study on the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-3.pdf>.
- Edeson, W., D. Freestone, and E. Gudmundsdottier. 2001. Legislating for Sustainable Fisheries: A Guide to Implementing the 1993 FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement. Washington, DC: World Bank.
- Ehler, C., and F. Douvère. 2009. Marine Spatial Planning: A Step-By-Step Approach Toward Ecosystem-Based Management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No. 53, ICAM Dossier No. 6. Paris: UNESCO. Available at <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/d87c0c421da4593fd93bbee1898e1d51.pdf>.
- European Commission. 2007. Guidelines for the Establishment of the Natura 2000 Network in the Marine Environment. Application of the Habitats and Birds Directives. Available at http://ec.europa.eu/environment/nature/natura2000/marine/docs/marine_guidelines.pdf.
- Food and Agriculture Organization of the United Nations. 1995. Code of Conduct for Responsible Fisheries. Rome: FAO. Available at <ftp://ftp.fao.org/docrep/fao/005/v9878e/v9878e00.pdf>.
- Food and Agriculture Organization of the United Nations. 2007. Report and documentation of the Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations, Rome, Italy, 12–14 June 2006. FAO Fisheries Report. No. 825. Rome: FAO. Available at <http://www.fao.org/docrep/010/a1061e/a1061e00.htm>.
- Gjerde, K. et al. 2008. Options for Addressing Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction. IUCN Marine Law and Policy Paper No. 2. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-2.pdf>.
- Gjerde, K. et al. 2008. Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction. IUCN Environmental Policy and Law Papers, Marine Series No. 1. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-1.pdf>.

- Godoy Herrera, J.C. 2003. Mesoamerican Biological Corridor: Regional Initiative for the Promotion of Forest Conservation. Paper for the XII World Forestry Congress, Québec, Canada, 21–28 September 2003. Rome: FAO. Available at <http://www.fao.org/DOCREP/ARTICLE/WFC/XII/MS15-E.HTM>.
- Govan, H. et al. 2009. Status and Potential of Locally-Managed Marine Areas in the South Pacific: Meeting Nature Conservation and Sustainable Livelihood Targets through Wide-Spread Implementation of LMMAs. SPREP/WWF/WorldFish-Reefbase/CRISP. Available at http://www.sprep.org/att/publication/000646_LMMA_report.pdf.
- Govan, H., W. Aalbersberg, A. Tawake and J. Parks. 2008. Locally-Managed Marine Areas: A Guide for Practitioners. Locally-Managed Marine Area Network. Available at <http://lmmnetwork.org/>.
- Government of South Australia. 2010. Marine Parks – Introduction. Online, <http://www.sa.gov.au/subject/Water,+energy+and+environment/Environment+and+natural+resources/Marine+conservation>.
- Hart, S. 2008. Elements of a Possible Implementation Agreement to UNCLOS for the Conservation and Sustainable Use of Marine Biodiversity in Areas beyond National Jurisdiction. IUCN Environmental Policy and Law Papers, Marine Series No. 4. Gland: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-MS-4.pdf>.
- Hatzioles, M., C.G. Lundin and A. Alm. 1996. Africa: A Framework for Integrated Coastal Zone Management. Washington, DC: World Bank.
- Hillary, A., M. Kokkonen and L. Max (eds.). 2002. Proceedings of the World Heritage Marine Biodiversity Workshop, Hanoi, Viet Nam, 25 February–1 March 2002. Available at http://whc.unesco.org/documents/publi_wh_papers_04_en.pdf.
- International Maritime Organization. 2001. Resolution A.927(22): Guidelines for the designation of Special Areas under MARPOL 73/78 and Guidelines for the identification and designation of Particularly Sensitive Sea Areas. IMO 22nd Assembly, 19–30 November 2001. Available at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D10469/927.pdf.
- International Maritime Organization. 2005. Resolution A.982(24): Revised guidelines for the identification and designation of particularly sensitive sea areas. IMO 24th Assembly, 21 November–2 December 2005. Available at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D25322/A982%2824%29.pdf.
- International Maritime Organization. 2007. Marine Environment Protection Committee (MEPC), 56th session, 9–13 July 2007. Online, http://www.imo.org/Newsroom/mainframe.asp?topic_id=109&doc_id=7537.
- International Maritime Organization. (Undated.) Particularly Sensitive Sea Areas. Online, http://www.imo.org/environment/mainframe.asp?topic_id=1357.
- International Maritime Organization. (Undated.) Special Areas under MARPOL. Online, http://www.imo.org/Environment/mainframe.asp?topic_id=760.
- IUCN General Assembly. 1988. Resolution 17.38: Protection of the Coastal and Marine Environment. 17th Session of the General Assembly of IUCN, San Jose, Costa Rica, 1–10 February 1988. Available at http://cmsdata.iucn.org/downloads/resolutions_recommendation_en.pdf.
- IUCN Marine Programme. 2005. A Compilation of Abstracts Relating to Marine Protected Areas and Fisheries Management. WS-MPA-05/5. IUCN information paper for the CCAMLR Marine Protected Areas Workshop, 29 August–1 September 2005. Unpublished.
- IUCN World Commission on Protected Areas. 2007. Establishing Networks of Marine Protected Areas: A Guide for Developing National and Regional Capacity for Building MPA networks. Non-technical summary report. Available at <http://cmsdata.iucn.org/downloads/nsmail.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.22: Building a Global System of Marine and Coastal Protected Area Networks. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- Kelleher, G. (ed.). 1999. Guidelines for Marine Protected Areas. WCPA Best Practice Protected Area Guidelines Series No. 3. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-003.pdf>.
- Kelleher, G., C. Bleakley and S.M. Wells (eds.). 1995. A Global Representative System of Marine Protected Areas. Washington, DC: World Bank.
- Kimball, L., D. Johnston, P. Saunders and P. Payoyo. 1995. The Law of the Sea: Priorities and Responsibilities in Implementing the Convention. Gland: IUCN.
- Kimball, L.A. 2003. International Ocean Governance: Using International Law and Organizations to Manage Marine Resources Sustainably. Gland and Cambridge: IUCN. Available at http://cmsdata.iucn.org/downloads/intl_ocean_governance_english.pdf.
- Kimball, L.A. 2005. The International Legal Regime of the High Seas and the Seabed Beyond the Limits of National Jurisdiction and Options for Cooperation for the Establishment of Marine Protected Areas (MPAs) in Marine Areas Beyond the Limits of National Jurisdiction. CBD Technical Series No. 19. Montreal: Secretariat of the Convention on Biological Diversity. Available at <http://www.cbd.int/doc/publications/cbd-ts-19.pdf>.
- Laffoley, D. d'A. (ed.). 2006. The WCPA Marine Plan of Action: Working Together to Secure a Global, Representative System of Lasting Networks of Marine Protected Areas. Consultation Version. Gland: IUCN WCPA. Available at <http://cmsdata.iucn.org/downloads/wpamarinepoaen.pdf>.

- Laffoley, D. d'A. (ed.). 2008. Towards Networks of Marine Protected Areas. The MPA Plan of Action for IUCN's World Commission on Protected Areas. Gland: IUCN-WCPA. Available at <http://www.wdpa-marine.org/MPAResources/MPAPlanningResources/Docs/Towards%20networks%20of%20marine%20protected%20areas.pdf>.
- Laffoley, D. d'A., and G. Grimsditch (eds.). 2009. The Management of Natural Coastal Carbon Sinks. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/carbon_management_report_final_printed_version.pdf.
- Laffoley, D., J. Day, L. Wood and B. Barr. 2008. Marine Protected Areas. In N. Dudley and S. Stolton (eds.). *Defining Protected Areas: An International Conference in Almeria, Spain*. Gland: IUCN. Available at http://cmsdata.iucn.org/downloads/almeria_proceedings_final.pdf.
- Martin, K., M. Samoilys, A. Hurd, I. Meliane and C. Lundin. 2006. Experiences in the Use of Marine Protected Areas with Fisheries Management Objectives: A Review of Case Studies. Paper for the FAO Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations, Rome, Italy, 12–14 June 2006. Available at <ftp://ftp.fao.org/docrep/fao/010/a1061e/a1061e01.pdf>.
- MPA News. 2008. Marine Peace Parks: Establishing Transboundary MPAs to Improve International Relations and Conservation. Vol. 9, No. 9, April 2008. Available at <http://depts.washington.edu/mpanews/MPA95.htm#peace>.
- MPA News. 2009. Planning MPAs for the Deep Ocean: How Can We Protect What We Do Not Yet Know? Vol. 11, No. 2, September–October. Available at <http://depts.washington.edu/mpanews/MPA110.pdf>.
- MPA News. 2009. South Africa announces plan for large offshore MPA. Vol. 10, No. 11, June. Online, <http://depts.washington.edu/mpanews/MPA108.htm#PEI>.
- National Oceanic and Atmospheric Administration. 2006. Marine Managed Areas: Best Practices for Boundary Making. Marine Boundary Working Group, Federal Geographic Data Committee. Charleston, SC: NOAA Coastal Services Center. Available at http://www.csc.noaa.gov/products/mb_handbook/MMA_Boundaries_Handbook.pdf.
- New Zealand Department of Conservation and Ministry of Fisheries. 2005. Marine Protected Areas Policy and Implementation Plan. Wellington: Department of Conservation and Ministry of Fisheries. Available at <https://www.biodiversity.govt.nz/pdfs/seas/MPA-Policy-and-Implementation-Plan.pdf>.
- New Zealand Ministry of Fisheries and Department of Conservation. 2008. Marine Protected Areas: Classification, Protection Standard and Implementation Guidelines. Wellington: Ministry of Fisheries and Department of Conservation. Available at <https://www.biodiversity.govt.nz/pdfs/seas/MPA-classification-protection-standard.pdf>.
- Notarbartolo di Sciara, G., D. Hyrenbach and T. Agardy. 2007. The Pelagos Sanctuary for Mediterranean Marine Mammals: Case Study. Available at http://www.cetaceanalliance.org/download/literature/NotarbartolodiSciara_etal_2007.pdf.
- Notarbartolo di Sciara, G., T. Agardy, D. Hyrenbach, T. Scovazzi and P. Van Klaveren. 2008. The Pelagos Sanctuary for Mediterranean Marine Mammals. *Aquatic Conservation: Marine and Freshwater Ecosystems* 18: 367–391. Available at http://www.tethys.org/_download/literature/Notarbartolo_etal_2008.pdf.
- OSPAR Commission. 2003. Recommendation 2003/3 on a Network of Marine Protected Areas. Available at http://www.ospar.org/v_measures/get_page.asp?v0=or03-03e.doc&v1=4.
- OSPAR Commission. 2008. 2007 Progress Report on the OSPAR Network of Marine Protected Areas. Available at http://www.ospar.org/documents/dbase/publications/p00359_OSPAR_MPA_status_report_2008.pdf.
- Parks. 1998. Marine Protected Areas. Vol. 8, No. 2. Available at http://cmsdata.iucn.org/downloads/parks_jun98.pdf.
- Parks. 2005. High Seas Marine Protected Areas. Vol. 15, No. 3. Available at http://cmsdata.iucn.org/downloads/15_3_lowres.pdf.
- Parks. 2005. Private Protected Areas. Vol. 15, No. 2. Available at http://cmsdata.iucn.org/downloads/parks_15_2.pdf.
- Ramsar Convention COP. 2002. Resolution VIII.14: New Guidelines for management planning for Ramsar sites and other wetlands. 8th meeting of the Conference of the Contracting Parties to the Ramsar Convention, Valencia, Spain, 18–26 November 2002. Available at http://www.ramsar.org/pdf/res/key_res_viii_14_e.pdf.
- Ramsar Convention COP. 2002. Resolution VIII.4: Wetland issues in Integrated Coastal Zone Management (ICZM). 8th meeting of the Conference of the Contracting Parties to the Ramsar Convention, Valencia, Spain, 18–26 November 2002. Available at http://www.ramsar.org/pdf/res/key_res_viii_04_e.pdf.
- Ritchie, K.B., and B.D. Keller (eds.). 2008. A Scientific Forum on the Gulf of Mexico: The Islands in the Stream Concept. Marine Sanctuaries Conservation Series NMSP-08-04. Silver Spring, MD: US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Sanctuary Program. Available at http://isurus.mote.org/Keys/microbiology/Scientific_Forum_Gulf_of_mexico.pdf.
- Salm, R., J. Clark and E. Siirila. 2000. Marine and Coastal Protected Areas: A Guide for Planners and Managers. Third edition. Washington, DC: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/2000-038.pdf>.
- Schwarte, C., and L. Siegele. 2008. Marine Protected Areas on the High Seas? An Introductory Guide to the Legal Issues Surrounding the Establishment of Marine Protected Areas on the High Seas. London: Foundation for International Environmental Law and Development (FIELD). Available at http://www.field.org.uk/files/Marine_protected_areas_screen.pdf.

- Scovazzi, T. 2002. The Revision of MAP Legal Framework: the Barcelona Convention and its Protocols. Brochure. Athens: UNEP Coordinating Unit for the Mediterranean Action Plan. Available at http://195.97.36.231/acrobatfiles/MAPDocAcrobatfiles/wssd/wssdbrochure_medu_eng.pdf.
- Secretariat of the Convention on Biological Diversity. 2004. Technical Advice on the Establishment and Management of a National System of Marine and Coastal Protected Areas. CBD Technical Series No. 13. Available at <http://www.cbd.int/doc/publications/cbd-ts-13.pdf>.
- Sobel, J., and C. Dahlgren. 2004. Marine Reserves: A Guide to Science, Design, and Use. Washington, DC: Island Press.
- South Africa Department of Environmental Affairs and Tourism. 2009. Draft notice declaring the Prince Edward Islands Marine Protected Area. Notice 421 of 2009. Government Gazette, May 8. pp. 125–126. Available at <http://www.greengazette.co.za/docs/2009/05/Gazettes/National/20090508%20-%20National%20Gazette%20No%2032198%20of%2008-May-2009,%20Volume%20527.pdf>.
- South Africa Department of Environmental Affairs and Tourism. 2009. Draft Regulations on the Management and Protection, Prince Edward Islands Marine Protected Area. Notice 422 of 2009. Government Gazette, May 8. pp. 127–133. Available at <http://www.greengazette.co.za/docs/2009/05/Gazettes/National/20090508%20-%20National%20Gazette%20No%2032198%20of%2008-May-2009,%20Volume%20527.pdf>.
- South Africa Department of Environmental Affairs and Tourism. 2009. Minister van Schalkwyk to gazette Prince Edwards Islands Marine Protected Area (MPA) proposal. Press statement. May 7. Online, <http://www.info.gov.za/speeches/2009/09050809551002.htm>.
- Spalding, M.D., H.E. Fox, G.R. Allen, N. Davidson, Z.A. Ferdaña, M. Finlayson, B.S. Halpern, M.A. Jorge, A. Lombana, S.A. Lourie, K.D. Martin, E. Mcmanus, J. Molnar, C.A. Recchia and J. Robertson. 2007. Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas. *BioScience* 57(7): 573–583. Available at http://www.nature.org/ourscience/index.htm?s_intc=header.
- Tethys Research Institute. (Undated.) Pelagos Sanctuary (map). Online, <http://www.tethys.org/sanctuary.htm>.
- United Nations. 2009. Ecosystem Approaches. Division for Ocean Affairs and the Law of the Sea. Online, http://www.un.org/Depts/los/ecosystem_approaches/ecosystem_approaches.htm.
- United Nations Educational, Scientific and Cultural Organisation. 2009. Global Open Oceans and Deep Seabed (GOODS): Biogeographic Classification. IOC Technical Series No. 84. Paris: UNESCO-IOC. Available at http://ioc-unesco.org/components/com_oe/oe.php?task=download&id=7094&version=1.0&lang=1&format=1.
- United Nations Educational, Scientific and Cultural Organisation. 2010. World Heritage Marine Programme. Online, <http://whc.unesco.org/en/marine-programme>.
- United Nations Environment Programme. 2006. Ecosystems and Biodiversity in Deep Waters and High Seas. UNEP Regional Seas Reports and Studies No. 178. UNEP and IUCN. Available at http://www.unep.org/pdf/EcosystemBiodiversity_DeepWaters_20060616.pdf.
- United Nations Environment Programme. 2008. The UNEP Large Marine Ecosystem Report: A Perspective on Changing Conditions in the LMEs of the World's Regional Seas. UNEP Regional Seas Report and Studies No. 182. Available at http://www.lme.noaa.gov/LMEWeb/Downloads/unep_lme_report.zip.
- VanderZwaag, D.L., and P. Macnab. 2010. Marine Protected Areas: Legal Framework for the Gully off the Coast of Nova Scotia (Canada). Gland, Switzerland: IUCN.
- Wells, S., and J. Day. 2004. Application of the IUCN Protected Area Management Categories in the Marine Environment. *Parks* 14(3): 28–38. Available at http://cmsdata.iucn.org/downloads/14_3lowres.pdf.
- World Bank. 2006. Scaling Up Marine Management: The Role of Marine Protected Areas. Report No. 36635 – GLB. Environment Department, Sustainable Development Network. Available at http://siteresources.worldbank.org/INTCMM/Publications/21108865/Final_Printed_Version_MPA_ESW.pdf.
- Young, T.R. 2006. The Legal Framework for MPAs and Successes and Failures in their Incorporation into National Legislation. Paper for the FAO Expert Workshop on Marine Protected Areas and Fisheries Management: Review of Issues and Considerations, Rome, Italy, 12–14 June. Available at <ftp://ftp.fao.org/docrep/fao/010/a1061e/a1061e05.pdf>.

D. Transboundary protected areas

- Bonnin, M., A. Bruszk, B. Delbaere, H. Lethier, D. Richard, S. Rientjes, G. van Uden and A. Terry. 2007. The Pan-European Ecological Network: Taking Stock. Nature and Environment No. 146. Belgium: Council of Europe.
- EECONET Action Fund. (Undated.) The ecological network concept. Online, <http://www.eeconet.org/eeconet/index.html>.
- Garstecki, T., and T. Greiber. 2009. Ecological Networks: Design, Legal Basis, Institutional Frameworks and Implementation in Practice. Biodiversity Policy Training Series. Course 2. IUCN-Environmental Law Centre, InWEnt-Capacity Building International, Adelphi Research.
- Global Transboundary Protected Areas Network. 2007. A New Initiative of the Transboundary Protected Areas Task Force. Online, http://www.tbpa.net/issues_02.htm.
- Global Transboundary Protected Areas Network. 2007. A Typology of Transboundary Protected Areas: Different Approaches for Different Needs. Online, http://www.tbpa.net/issues_04.htm.
- Global Transboundary Protected Areas Network. 2007. UNEP-WCMC Transboundary Protected Areas Inventory - 2007. Online, http://www.tbpa.net/tpa_inventory.html.
- Global Transboundary Protected Areas Network. 2007. Using the Law to Help Transboundary Conservation. Online, http://www.tbpa.net/issues_01.htm.
- IUCN Commission on Environmental Law. 2000. Landscape Conservation Law: Present Trends and Perspectives in International and Comparative Law. Proceedings of a Colloquium Commemorating the 50th Anniversary of IUCN, The World Conservation Union. Palais du Luxembourg, Paris, France, 30 October 1998. Environmental Policy and Law Paper No. 39. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/EPLP-039.pdf>.
- IUCN World Parks Congress. 2003. Recommendation V.11: A Global Network to Support the Development of Transboundary Conservation Initiatives. Vth IUCN World Parks Congress, Durban, South Africa, 8–17 September 2003. Available at <http://cmsdata.iucn.org/downloads/recommendationen.pdf>.
- Michelot, A., with B. Ouedraogo. 2010. Transboundary Protected Areas: Legal Framework for the W Transboundary Biosphere Reserve (Benin, Burkina Faso, Niger). Gland, Switzerland: IUCN.
- Parks. 1999. Bioregional Approaches to Protected Areas. Vol. 9, No. 3. Available at http://cmsdata.iucn.org/downloads/parks_oct99.pdf.
- Permanent Secretariat of the Alpine Convention. 2005. The Multi-Annual Work Programme of the Alpine Conference 2005–2010. Innsbruck. Available at http://www.alpconv.org/NR/rdonlyres/26C9672B-98A8-4808-95A9-515AC4D79F7E/0/MAP_E_GESAMT.pdf.
- Ramsar Convention COP. 1990. Resolution 4.4: Implementation of Article 5 of the Convention. 4th Meeting of the Conference of the Contracting Parties, Montreux, Switzerland, 27 June–4 July 1990. Available at http://www.ramsar.org/pdf/res/key_res_4.4e.pdf.
- Ramsar Convention COP. 1999. Resolution VII.19: Guidelines for international cooperation under the Ramsar Convention. 7th meeting of the Conference of the Contracting Parties to the Ramsar Convention, San José, Costa Rica, 10–18 May 1999. Available at http://www.ramsar.org/pdf/res/key_res_vii.19e.pdf.
- Ramsar Secretariat. (Undated.) Transboundary Ramsar Sites. Online, http://www.ramsar.org/cda/en/ramsar-documents-trss-transboundary-ramsar-21073/main/ramsar/1-31-119%5E21073_4000_0.
- Sandwith, T., C. Shine, L. Hamilton and D. Sheppard. 2001. Transboundary Protected Areas for Peace and Co-operation. WCPA Best Practice Protected Area Guidelines Series No. 7. Gland and Cambridge: IUCN. Available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-007.pdf>.
- Tropical Coasts. 2008. Conserving the Sulu and Sulawesi Seas. Vol. 15, No. 1, July. Available at http://d130148.u37.wsiph2.com/publications/TC/tc_1501.pdf.
- United Nations Educational, Scientific and Cultural Organisation. 1995. Biosphere Reserves: Seville Strategy for Biosphere Reserves and Statutory Framework of the World Network of Biosphere Reserves. Paris: UNESCO. Available at <http://unesdoc.unesco.org/images/0010/001038/103849eb.pdf>.
- United Nations Educational, Scientific and Cultural Organisation. 2000. Seville +5 Recommendations for the establishment and functioning of Transboundary Biosphere Reserves. Available at <http://www.unesco.org/mab/doc/brs/TBR.pdf>.
- United Nations Educational, Scientific And Cultural Organization. 2001. Report of the Ad Hoc Task Force on Transboundary Biosphere Reserves. In Seville + 5: International Meeting of Experts, Pamplona, Spain, 23–27 October 2000. Proceedings. MAB Report Series No. 69. Paris: UNESCO. Available at <http://unesdoc.unesco.org/images/0012/001236/123605m.pdf>.
- United Nations Educational, Scientific and Cultural Organisation. 2010. List of Transboundary Biosphere Reserves. Online, http://www.unesco.org/mab/doc/brs/TBR_list.pdf.

Index

Aarhus Convention (1998) I.153, I.154-158

- access to information I.154
- access to justice I.155
- ECE role I.156
- participation I.155
- signature and entry into force I.154
- UNEP guidelines (2010) I.157

access to information I.159-165: *see also* good governance; participation in decision making

- documents on request I.161
- documents for review I.160
- freedom of information legislation I.162
- as legislative objective III(1).62
- management plans III(1).222(d)
- participation in decision making and I.167
- protected areas, key elements I.160, I.162, III(1).291
- refusal of information, standards/guidelines I.164
- transparency and I.165
- voluntarily conserved areas, establishment/designation as formal protected areas III(1).210-211

ACCOBAMS

- MPAs and (Annex 2) III(2).124, III(2).126
- purpose and conservation measures (ACCOBAMS II) III(2).128

accountability

- authorized officers III(1).342
- classic governance approach (state-owned/state-controlled) and II.20, II.22
- general goal III(1).89-90
- legislative provisions III(1).66, III(1).68, III(1).75
- protected areas system and site III(1).68, III(1).90, **Box** III(1)-5
- statutory corporations/parastatals III(1).76, III(1).78

adaptive management I.103-107

- boundaries and zones, demarcation I.104, I.105, I.105-106, III(1).171-175
- buffer zones and connectivity conservation and III(1).227
- climate change and: *see* climate change, adaptive management and
- day-to-day responses I.104
- evolution of concept/definition I.103
- flexibility, importance 3(1), I.22
- invasive alien species (IAS) and I.105, I.122
- legislative controls and processes, importance I.106
- legislative provisions, key considerations I.104-106, III(1).117, III(2).212-213
- management plan provisions I.104, III(2).212-213, III(1).220(i), III(2).168
- MPAs III(2).25, III(2).183, III(2).212-213
- precautionary principle and I.113
- protected areas system plan and III(1).117
- protected areas system and site III(1).90
- voluntarily conserved areas III(1).244
- zoning as management tool and III(1).224

administrative appeals III(1).380-382

traditional compliance and dispute resolution mechanisms III(1).382

advisory bodies III(1).97-102

authority for establishment, desirability of inclusion III(1).97, III(1).98

combination of general and specific authority III(1).98

membership III(1).100, III(1).102

MPAs III(2).186-187

participation in decision making (MPAs), role III(2).202

purposes, examples III(1).98

variety of forms and outputs III(1).97, III(1).101

African Convention on the Conservation of Nature and Natural Resources (revised) (2003) I.219-224

buffer zones and connectivity conservation (XII(4)) I.224

CBD in situ conservation and protected areas provisions and (XII) I.221

conclusion, entry into force and parties I.219 frame

'conservation area' (III(d) and Annex 2) I.221

development of associated land use plans (VI) I.224

establishment of additional conservation areas (XII(1)) I.222

implementation pre-entry into force, importance I.220

incentives for conservation (XVII) I.223

indigenous and community conserved areas (ICCAs) I.223

local communities and (XII(2)) I.223

objectives I.219 frame

overview I.219

precautionary principle I.111

protected area management categories (IUCN), relationship I.221

protected areas law, relevance for I.220-224

protection of indigenous knowledge and traditional rights (XVII) I.223

sustainable use/development and (VI) I.220, I.224

Agenda 21

biological diversity conservation (Chapter 15) I.264

buffer zones and connectivity conservation I.264

conservation on private land I.264

EIAs and I.264

forest principles (Chapter 11) I.265, I.271

in situ conservation measures I.264

land use planning and conservation (Chapter 10) III(1).132

marine and coastal protection (Chapter 17) 139, I.270

regulation and control systems I.264

rehabilitation and restoration of damaged ecosystems I.264

Aïr and Ténéré National Nature Reserve (Niger) Box II-2**Akwé:Kon voluntary guidelines on EIAs undertaken by indigenous and local communities III(1).389**

Algiers Convention: see African Convention on the Conservation of Nature and Natural Resources (revised) (2003)

Almeria Conference (2007), protected area management categories (IUCN, 2008), applicability I.72, I.86

Alpine Conference IV.65

Alpine Convention (1991)

- areas for action **IV.64**
- polluter pays principle **IV.63**
- scope **IV.62**
- transboundary cooperation **IV.63-65**

Alto Fragua–Indiwasi National Park (Colombia) a-1

Angola, constitutional provisions relevant to protected areas **Box III(1)-1**

Antarctic Regional Seas Programme III(2).106

Arctic Regional Seas Programme III(2).106

Areas of Special Conservation Interest (ASCIs/Emerald Network) I.228-230

Argentina, constitutional provisions on indigenous rights to traditional lands **Box III(1)-2**

Australia

- Booderee National Park case study (Farrier and Adams 2010) **II.6**
- civil enforcement **III(1).370, Box III(1)-12**
- conservation agreements **III(1).247, III(1).252**
- corporate liability **III(1).378, Box III(1)-13**
- criminal penalties **III(1).354**
- easements/covenants running with the land, statutory provision for **III(1).253**
- funds/fund raising **III(1).398, Box III(1)-14, III(1).404**
- Great Australian Bight Marine Park **Box III(2)-4, III(2).29, III(2).43, III(2).172**
- Great Barrier Reef **III(1).49, III(2).82, III(2).14, III(2).138, III(2).175, III(2).210, III(2).230**
- interim protection **III(1).177**
- land trusts (National Strategy for the Conservation of Biological Diversity) **II.120**
- legislative objectives linked to principles **III(1).63, Box III(1)-3**
- MPAs, exceptionally large areas **Table III(2)-1, III(2).18**
- National protected areas legal framework case study (Boer and Gruber 2010) **III(1).63, III(1).177, III(1).354, III(1).376, III(2).13-14, III(2).43**
- National Reserve System **II.99**
- New South Wales protected areas legislation case study (Boer and Gruber 2010) **III(1).252, III(2).44**
- protected areas legislation (objectives) **III(1).49, III(1).63, Box III(1)-1**
- Solitary Islands **III(2).43**
- strict liability **III(1).376**
- tenure in relation to land and resource use rights **II.101, Table II-4**

authorized officers: *see also* compliance and enforcement; offences and penalties

- accountability **III(1).342**
- appointment **III(1).324**
- community and private guards (voluntary conserved areas) **III(1).327-328**
- definition of powers/job description, importance **III(1).335, III(1).342**
- definition and status (legislative provisions) **III(1).322-333**
- definition/classification as **III(1).323**
- duties and responsibilities other than law enforcement **III(1).335, III(1).341-342**
- emergency duties **III(1).342**
- enforcement powers, 3(1).324, 3(1).330 **III(1).338, III(1).336**
- exemption from regulations **III(1).267, III(1).340**
- honorary officers **III(1).333, Box III(1)-11**
- identification documentation/uniform **III(1).325, III(1).342**
- legal enforcement proceedings **III(1).379**

- MPAs and **III(2).226-227**
- outreach and community involvement **III(1).343-344**
- police powers **III(1).335-340**
- powers other than police/law enforcement powers **III(1).335**
- public service status **III(1).326**
- qualifications **III(1).324**
- reinforcement from other enforcement agencies **III(1).329-332**
- training requirement **III(1).324, III(1).330, III(1).336, III(1).338, III(1).342**
- Awá Life Reserve Box II-1**
- Baltic Regional Seas Programme III(2).106**
- Baltic Sea Convention (1992) (Helsinki Convention)**
 - Helsinki Convention–OSPAR joint work programme on MPAs **III(2).123**
 - object and purpose **III(2).122**
 - parties **III(2).122**
- Benin, W Transboundary Biosphere Reserve Box II-2**
- Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) I.225-230**
 - conclusion, entry into force and parties **I.225, I.225 frame**
 - Habitats Directive and **I.230**
 - objectives **I.225 frame**
 - observer status **I.225**
 - PEEN and **IV.59**
 - protected areas law, relevance for **I.226-230**
 - TBPAs **IV.54**
- best available information, precautionary principle and I.113**
- best practice management principles 162, I.3, I.40-138**
 - MPAs and **III(2).13, III(2).190**
- Biodiversity Convention: see CBD (Convention on Biodiversity) (1992) (CBD)**
- bioprospecting II.94, III(1).386(b), III(1).402, III(1).408**
 - as threat to MPAs **III(2).23, III(2).33, III(2).155, III(2).222**
 - MPAs and stakeholder interests **III(2).42, III(2).136(i)**
- biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves**
 - ‘biosphere reserve’ (Statutory Framework 1) **I.243, I.246**
 - definition (Statutory Framework 1) **III(1).32, III(1).196**
 - designation as part of Network, criteria **I.243, I.246**
 - ecosystem approach and **I.60**
 - functions **I.247, III(1).197**
 - governance models **I.244**
 - integration of protected area systems and surrounding areas principle and (WPC Rec. V.9) **I.240**
 - legislative considerations **I.245, I.249, III(1).193, III(1).195-211**
 - list **Table IV-2**
 - Madrid Action Plan (2008) **I.60, I.252, III(1).193-194**
 - management plans and (SF 4) **I.95, I.248, III(1).200, III(1).213**
 - national conservation policy, inclusion in **III(1).195**
 - objectives **I.243 frame**
 - Pamplona Recommendations (2000) (transboundary biosphere reserves (TBRs)) **IV.70**

- participation in decision making (Seville Strategy) I.250
 - periodic reviews (SF 5) I.250
 - protected area status (core zones) I.15, I.245, I.248, I.249, III(1).199
 - Seville Strategy and Statutory Framework (SF) (1995) I.243, I.245, I.246, III(1).193-194
 - statistics I.244
 - sustainable use/development and I.248, III(1).195
 - TBPAs and IV.18, IV.33, IV.66-70
 - voluntary nature/incentives I.244
 - W Transboundary Biosphere Reserve (Benin, Burkina Faso and Niger) **Box II-2**
 - WPC and I.244, III(1).192
 - zoning I.243, I.248-249
- Birds Directive (CD 79/409/EEC):** *see also* Habitats Directive (92/43/EEC); Natura 2000 network
- applicability I.237 frame
 - objectives I.237 frame
 - SPAs I.238, III(2).127
- Black Sea**
- Biodiversity and Landscape Conservation Protocol (2002) III(2).117
 - regional convention III(2).107
 - Regional Programme III(2).106
- Booderee National Park case study (Farrier and Adams 2010) II.6**
- boundaries and zones, demarcation**
- adaptive management and I.104, I.105-106, III(1).171-175
 - amendments I.104-106, III(1).150, III(1).171-175
 - demarcation on the ground, need for III(1).167, III(1).168
 - geographic coordinates, need for I.170
 - legal descriptions, need for III(1).149(d), III(1).167-169, III(1).221(b)
 - MPAs, requirements and special considerations III(2).203-205
 - participation in decision making and II.91-92, III(1).173, III(2).205
 - Ramsar list and I.206
 - science-based analysis, need for III(1).117(d), III(1).173
 - topographical features and III(1).169-170
 - Western Hemisphere Convention (1940) and I.235
 - World Database of Protected Areas (WDPA) III(1).170
 - World Heritage List and I.194, I.197
- Brazil**
- constitutional provisions relevant to, indigenous rights to traditional lands **Box III(1)-2**
 - protected areas **Box III(1)-1**
- buffer zones and connectivity conservation I.64-71:** *see also* biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves; connectivity (marine environment); management plans; zoning as management tool
- adaptive management and III(1).227
 - African Convention (rev.) XII(4) I.224
 - Agenda 21 I.264
 - alternative legal approaches III(1).234-235, **Table III(1)2**
 - 'biodiversity corridor' III(1).32
 - biosphere reserves and I.245, I.248, I.249, III(1).198
 - 'buffer zone' I.64, III(1).32
 - 'connectivity conservation' I.64

- connectivity conservation areas and land use legislation **III(1).234**
 - coordination mechanisms **III(1).231, III(1).231-232, III(1).236**
 - Durban Action Plan (2004) **I.56, I.67**
 - ‘ecological corridor’ **III(1).32, IV.18**
 - ecosystem approach (CBD 8(d)) **I.63**
 - EIAs and **I.70**
 - elements for inclusion in legislation **III(1).236**
 - Habitats Directive and **I.242, IV.53**
 - identification as part of designation process **III(1).229, III(1).236**
 - land use planning laws **III(1).228, III(1).230**
 - legal/administrative controls on land/resource use **I.249**
 - management plan considerations **III(1).221, III(1).327-337**
 - marine environment and **III(2).29, III(2).161(f)**
 - non-protected areas legislation **I.69**
 - private protected areas (PPAs) as **II.44**
 - protected areas legislation **I.69, III(1).227-233**
 - protected areas system plan, identification in **I.52, III(1).128, III(1).227, III(1).229**
 - voluntarily conserved areas and **I.39, III(1).208**
- Bulgaria**, constitutional provisions relevant to protected areas **Box III(1)-1**
- burden/standard of proof** **III(1).371-378**
- civil actions **III(1).371, III(1).373, III(1).375**
 - criminal offences, ‘beyond reasonable doubt’ **III(1).372**
 - strict liability **III(1).375-376**
- Burkina Faso**
- pastoral laws and codes **Box II-2**
 - W Transboundary Biosphere Reserve **Box II-2**
- Canada**
- Federal protected areas legislation (Benidickson 2010) **III(1).65**
 - Gully Marine Protected Area legal case study (VanderZwaag and Macnab 2010) **III(2).14, III(2).220**
 - Kuururjuaq Park (Naskapi people) **Box II-2**
 - MPAs, legislation **III(2).13**
 - Ontario protected area legislation, case study (Benidickson 2010) **III(1).23, III(1).65**
- carbon neutrality measures** **I.129**
- carbon sinks**
- forests and grasslands **I.130, I.131**
 - marine and coastal protected areas as **I.130, I.131, III(2).4, III(2).161(g)**
 - prevention of illegal activities **I.130**
 - protected areas as **I.130**
 - restoration of degraded protected areas and **I.130**
- Caribbean Regional Seas Programme** **III(2).106**
- Caspian Sea Regional Programme** **III(2).106**
- Category V and VI protected areas, regulations for** **III(1).282-284**
- CBD (Convention on Biodiversity) (1992) (CBD):** *see also* COPs (CBD)
- Agenda 21 and **I.264**
 - ‘biodiversity’ (CBD 2) **III(1).31, III(2).110**
 - buffer zones and connectivity conservation and (CBD 8) **I.66**

- CBD Programme of Work on Marine and Coastal Biodiversity: see Marine and Coastal Diversity, CBD Programme of Work (MPAs) (Dec. IV (1998)/Dec. VII/5 (2004)) (general)
- CBD Programme of Work on Protected Areas (2004): see CBD Programme of Work on Protected Areas (Dec. VII/28 (2004))
- conclusion, entry into force and parties I.181 frame
- Conference of the Parties: see COPs (CBD)
- ecosystem obligation (CBD 8(d)) I.66, I.182
- governance approaches and II.73-74
- IAS: see invasive alien species (IAS) (general)
- interrelationship with other biodiversity-related treaties I.181
- objectives (CBD 1) I.181 frame
- precautionary principle (preamble) I.110
- 'protected area' (CBD 2) I.12-13
- protected areas law, relevance for I.182
- scope I.181
- system planning obligation (CBD 8(a)) I.47
- text (CBD 8) **Box I-6**
- CBD Programme of Work on Protected Areas (Dec. VII/28 (2004))** I.183-185: see also Marine and Coastal Diversity, CBD Programme of Work (MPAs) (Dec. IV (1998)/Dec. VII/5 (2004)) (general); WSSD Plan of Implementation (2002)
- buffer zones and connectivity conservation I.66
- ecosystem approach I.57
- good governance and I.148
- governance approaches and II.74
- incentives for conservation **Box I-6**
- legal and policy framework, elements for inclusion I.185, **Box I-5**
- management plans I.93
- protected area management categories (IUCN, 2008) and I.80, I.89(b), III(1).142
- scope and applicability I.183
- system planning I.47
- TBPAs and IV.36-37
- voluntary conservation/indigenous and community conserved areas I.85, I.169-170, II.74
- WSSD targets (2002) I.183
- CCA:** see indigenous peoples and community conserved areas (ICCAs)
- Charlie Gibbs Fracture Zone** **Box III(2)-9**
- Chile**, Pumalin Park Nature Sanctuary case study (Soto Oyarzun 2010) II.46
- China**, Qomolangma National Nature Preserve **Box II-2**
- CITES** I.181
- civil actions** III(1).363-370
- burden/standard of proof III(1).371, III(1).373
- civil penalties III(1).363-377
- standing/right to bring action III(1).366
- strict liability III(1).375
- 'third party' actions to enforce law III(1).368-370
- traditional compliance and dispute resolution mechanisms III(1).320
- civil law:** see offences and penalties

climate change

- adaptive management and I.126-127, III(1).171-175, III(2).212-213, IV.31
- boundaries and zones, demarcation and III(1).171-175
- ecosystem approach and I.62
- exchange of information I.127
- invasive alien species (IAS) and I.123, IV.101
- marine environment and III(2).25, III(2).35
- mitigation I.128-132: *see also* carbon sinks
- MPAS as climate change baseline III(2).161(h)
- 'Natural solutions: protected areas helping people cope with climate change' (2009) I.126
- nature of threat I.124
- protected areas system planning and I.45, I.53, I.126
- REDD/REDD+ I.132
- science-based analysis, need for III(1).221(g)
- seriousness of threat Intro 5
- TBPAs and IV.101
- transboundary cooperation and I.138

Climate Change Convention (1992), precautionary principle I.111

CMS: *see* Migratory Species of Wild Animals Convention (1979) (CMS)

co-management agreements II.102-103, II.107

- ancillary agreements II.107, III(1).248
- conservation agreement, relationship with II.107, III(1).248-249
- contractual nature/consent requirement II.103, II.107
- elements for inclusion II.62, II.102-103, II.107, III(1).86, III(1).95, III(1).248
- judicial review and II.107, III(1).248
- traditional compliance and dispute resolution mechanisms III(1).320
- transfer of land from government entity to protected areas authority and III(1).121
- transparency requirement III(1).94
- written agreement, need for III(1).94

co-management/shared governance of protected areas II.57-62

- advantages II.57, II.60, III(1).92-93
- co-management agreements and III(1).94: *see also* co-management agreements as continuum II.61
- core element of protected areas legislation III(1).91
- definition III(1).94
- flexibility/multiplicity of models II.60, III(1).91
- history of II.58
- ICCA II.31, II.98
- IUCN management categories guidelines, 2008 III(1).32, III(1).94
- legal elements, key considerations III(1).94-95
- PPAs II.98
- tenure considerations II.98
- voluntarily conserved areas, special considerations II.98, III(1).96
- WPC (Rec. V.25) and II.57, II.59

Colombia, constitutional provisions on

- indigenous rights to traditional lands **Box III(1)-2**
- protected areas **Box III(1)-1**

Community Conserved Areas (CCAs): *see* indigenous peoples and community conserved areas (ICCAs)

- compensation for acquisition of rights** III(1).181-191
- conservation without compensation III(1).191
 - customary use rights III(1).186
 - easements/covenants running with the land III(1).184-186
 - interim protection III(1).180(g)
 - land use planning and environmental protection laws and 191
 - legislative provision for (non-protected areas legislation) III(1).182
 - negotiations and consultation with interested parties III(1).183
 - rights of way III(1).186
- compliance and enforcement** III(1).311-382
- administrative appeals III(1).380-382
 - community support, importance/ways of encouraging III(1).312, III(1).315-318, III(2).228
 - cooperation agreements with other enforcement agencies III(1).329, III(2).227
 - invasive alien species (IAS) and I.122
 - legal proceedings III(1).379
 - management plans (protected areas) and I.101
 - MPAs, special challenges III(2).32, III(2).224-228
 - penal sanctions, alternatives to III(1).318: *see also* offences and penalties
 - resource constraints III(1).314
 - TPBAs IV.110-112
 - voluntarily conserved areas III(1).319-321, III(1).327-328
- compulsory acquisitions** III(1).1(e), III(1).124(f)
- easements/covenants running with the land and II.116, III(1).184
- conflict resolution mechanisms** III(1).110, **Box III(1)-6**
- connectivity (marine environment):** *see also* buffer zones and connectivity conservation; marine and coastal protected areas (MPAs); marine and coastal systems, threat to; marine pollution; transboundary protected areas (TBPAs)
- buffer zones III(2).29, III(2).161(f)
 - CBD Programme of Work (2004) III(2).5, III(2).26, III(2).216
 - climate change and III(2).25
 - community property/user rights vs open access III(2).37-40
 - coordination mechanisms, need for **Box III(2)-4**
 - design considerations and III(2).193
 - large marine ecosystem approach (LME) III(2).27
 - management plans, implications for III(2).26
 - marine, coastal and inland systems III(2).25
 - Ramsar Guidelines and III(2).26
- conservation agreements** II.102-106, III(1).245-253
- co-management agreements and II.107, III(1).248-249: *see also* co-management agreements
 - elements for inclusion II.102, II.104-105, III(1).207, III(1).246, III(1).248-250, III(1).296-299
 - function III(1).245
 - international practice III(1).247
 - perpetual integrity and II.103, II.105-106, III(1).246, III(1).252-253
 - planning development and III(1).252
 - preparation and entry into force II.105, III(1).207, III(1).245-246, III(1).250
 - terminology II.104
 - traditional compliance and dispute resolution mechanisms III(1).320
 - voluntarily conserved area: *see* voluntarily conserved areas/voluntary conservation efforts, special considerations

conservation banking III(1).403-405

conservation easement: see easements/covenants running with the land

conservation values, tools for protecting in absence of designed protected area III(1).124-126: see also land use planning and environmental protection laws as tool for protection of conservation values; legal status of land or sea considered for designation as protected area

constitutional provisions on indigenous rights to traditionally-lands III(1).47, **Box** III(1)-2

constitutional provisions relevant to protected areas

conservation, environmental protection and sustainability III(1).9

examples **Box** III(1)-1

fundamental rights and responsibilities/human rights III(1).8

importance of grounding protected area legislation in III(1).46

as indication of public policy III(1).43, III(1).45-46

participation in decision making III(1).9

precautionary principle for III(1).9

social equity and justice in relation to protected areas for III(1).9

tenure in relation to land and resource use rights III(1).10

traditional rights III(1).10

contiguous zone (UNCLOS 33) III(2).57

continental connectivity IV.19-20

continental margin (UNCLOS 76(3)) III(2).62, III(2).64

continental shelf (UNCLOS 76-85) III(2).61-65

artificial islands, installations and structures (UNCLOS 80) III(2).65

coastal state rights (UNCLOS 77) III(2).61

definition (UNCLOS 76) III(2).61

'natural resources' (UNCLOS 77) III(2).61

outer limits (UNCLOS 76(6)) III(2).63

Convention for the Conservation of the Biodiversity and the Protection of Wilderness Areas in Central America (1992) I.232

Cook Islands

compliance and enforcement of regulations III(1).318

strict liability III(1).377

coordination mechanisms III(1).103-110

boundaries and zones, amendments to III(1).175

buffer zones and connectivity conservation areas III(1).231, III(1).231-232, III(1).236

conflict resolution mechanisms III(1).110, **Box** III(1)-6

coordination at broad level, specification of mechanism for III(1).108

decision making institutions, requirement to consult and coordinate III(1).106

emergencies in protected areas III(1).310

examples III(1).106

general provisions III(1).104

identification of existing or new mechanism III(1).107

identification of levels and sectors, importance III(1).106

intergovernmental/transboundary coordination III(1).105

interim protection and III(1).180(e)

intra-government coordination (vertical coordination) III(1).105

local government entities, coordination and consultation with III(1).104

management plan, inclusion in III(1).220(c)

MPAs: see marine and coastal protected areas (MPAs), institutional arrangements, coordination mechanisms
 overlap and conflicts, mechanisms for avoiding III(1).109
 policy level coordination III(1).70, III(1).103, III(1).105
 powers and responsibilities, inclusion under III(1).104, III(1).128
 priority areas III(1).105
 protected areas system plan and III(1).118(c), III(1).128
 technical level/cross-sector coordination (horizontal coordination) III(1).105, III(1).220(c)
 voluntarily conserved areas, special considerations/areas for help III(1).111-112, III(1).156

COPs (CBD)

1994 (1st), Dec. I/9 (marine and coastal diversity as matter of special concern) I.18, III(2).89
 1995 (2nd), Dec. II/10 (Jakarta Mandate on Marine and Coastal Diversity) III(2).89
 1998 (4th), Dec. IV/5 (CBD Programme of Work on Marine and Coastal Diversity) III(2).90-91
 2000 (5th), Dec. V/6 (ecosystem approach) I.54
 Ad Hoc Technical Expert Group I.18
 2002 (6th), Dec. VI/23 (invasive alien species) I.115, I.119
 2004 (7th), Akwé:Kon voluntary guidelines on EIAS undertaken by indigenous and local communities III(1).389
 2004 (7th), Dec. VII/5 (CBD Programme of Work on Marine and Coastal Diversity): see Marine and Coastal
 Diversity, CBD Programme of Work (MPAs) (Dec. IV (1998)/Dec. VII/5 (2004)) (general)
 2004 (7th), Dec. VII/11 (ecosystem approach) I.54
 2004 (7th), Dec. VII/28 (Programme of Work on Protected Areas): see CBD Programme of Work on Protected
 Areas (Dec. VII/28 (2004))
 2008 (9th), Dec. IX/18 (re-affirmation of Dec. VII/28 (protected area management categories)) I.81, II.73,
 III(1).142
 2008 (9th), Dec. IX/20 (scientific guidance and criteria for MPAs: Annexes I and II) III(2).92-94

COPs (CMS), 205, CMS Res. 8.18 (CBD–CMS Joint Work Programme) I.213

COPs (Ramsar)

1990 (4th), Res. 4.4 (implementation of Ramsar 5) I.203
 1999 (7th), Res. VII.8 (Guidelines for establishing and strengthening local communities and indigenous peoples'
 participation in the management of wetlands) II.78
 2002 (8th), Res. VIII.14 (Guidelines for management planning for Ramsar sites and other wetlands) II.77,
 III(2).97-98
 2005 (9th), Res. IX.22 (Ramsar sites and systems of protected areas) I.205

corporate liability III(1).378, **Box III(1)-13**

costs and benefits of protected areas I.113, I.173-174, II.93-95

Council of Europe: see Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979);
 PEEN (Pan-European Ecological Network)

criminal offences and penalties: see also civil actions; offences and penalties

burden/standard of proof III(1).372, III(1).374, III(1).375-376
 criminal code/general criminal law, applicability III(1).350
 criminal procedures III(1).351
 EU Directive 2008/99/EC (protection of the environment through criminal law) III(1).352
 penalties III(1).353-362

cultural heritage III(1).31

as legislative objective III(1).60
 management plan, inclusion in III(1).221
 Underwater Cultural Heritage Convention (2001) **Box III(2)-7**, III(2).102

'customary law' III(1).32

customary rights: see also indigenous or traditional peoples, protection of indigenous knowledge and traditional rights

- compensation for acquisition III(1).186
- constitutional recognition III(1).47, **Box III(1)-2**
- establishment as protected area and II.33, III(1).149(b)

Denmark

- compensation provisions III(1).185
- easements/covenants running with the land, compensation III(1).185
- extension of protection beyond formal protected areas system **Box III(1)-8**

designation of protected areas: see establishment and designation of protected areas

Durban Action Plan (2004)

- ecosystem approach I.56, I.67
- good governance and II.89
- protected areas authorities and III(1).29
- system planning I.47
- TBPAs ('Global Network to Support the Development of Transboundary Conservation Initiatives') IV.16
- transboundary cooperation and IV.16
- voluntarily conserved areas/voluntary conservation efforts and II.9, II.89

Earth Charter (2000) I.266-268

easements/covenants running with the land II.108-116

- advantages II.110
- compensation III(1).184-186
- compulsory easement II.116, III(1).184
- definition II.108
- incentives for conservation and II.113, II.122, III(1).123(b)
- land registry record II.112
- land trusts and II.115, II.119
- legal agreement providing for II.111-112
- negotiated easement III(1).123(b)
- perpetual integrity and II.109, II.110, II.113
- rights of way III(1).186-189
- statutory provision for III(1).253

East Asian Seas Regional Programme III(2).106

Eastern Africa Regional Seas Programme III(2).106

- Protocol concerning Protected Areas and Wild Fauna and Flora (1989) III(2).113-114

Economic Commission for Europe (ECE), Aarhus Convention (1998) and I.156

ecosystem approach

- benefits I.61-63
- CBD and I.54, I.66, I.182
- definition (CBD) I.54, III(1).31-32
- Durban Action Plan and I.56, I.67
- endorsement by WPC V (2003) I.56
- extension of protection beyond formal protected areas system III(1).127-130
- FAO and I.60
- Global Environment Facility and I.60
- invasive alien species (IAS) and I.63, I.121
- large marine ecosystems III(2).27

- Madrid Action Plan for Biosphere Reserves (2008) and I.60
- Marine and Coastal Diversity, CBD Programme of Work (Programme element 3: MAPS) (Dec. IV (1998)/Dec. VII/5 (2004)) III(2).159
- marine environments and oceans III(2).161(c): see also connectivity (marine environment)
- Millennium Ecosystem Assessment (2005) and I.63
- national and transboundary application (CBD Programme of Work (2004)) I.57
- protected areas system plan and III(1).118(c), III(1).127-130
- Ramsar Convention (1971) I.59, III(2).97, III(2).216
- UNCLOS 194(5) III(2).68, III(2).76
- UNDP and I.60
- UNEP and I.60
- UNGA resolutions (2009) related to marine protection I.58
- voluntarily conserved areas III(1).128
- WSSD Plan of Implementation (2002) related to marine protection I.58
- Ecuador, constitutional provisions on**
- protected areas **Box III(1)-1**
- indigenous rights to traditional lands **Box III(1)-2**
- EEZ (exclusive economic zone) (UNCLOS 55-75)**
- definition (UNCLOS 56) III(2).58
- freedom of navigation (UNCLOS 58) III(2).72
- management rights and duties III(2).22, III(2).71
- MPAs/Natura 2000 and III(2).127-129
- pollution, regulation of shipping to prevent III(2).60
- rights, jurisdiction and duties of coastal states (UNCLOS 56) III(2).58-59
- straddling stocks/migratory species, cooperation obligation (UNCLOS 63-4) III(2).58
- WHC marine sites III(2).100
- El Salvador, constitutional provisions relevant to protected areas **Box III(1)-1****
- Emerald Network:** see Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)
- emergency and incident management III(1).306-310**
- authorized officers' role III(1).342
- contingency planning III(1).307, III(1).308
- coordination mechanisms III(1).310
- protected areas legislation, key elements for inclusion III(1).310
- TBPAs IV.109
- environmental and social impact assessments (EIAs) III(1).383-389**
- activities in formal protected areas requiring written permission III(1).283
- Agenda 21 and I.264
- Akwé:Kon voluntary guidelines on EIAs for indigenous and local communities III(1).389
- buffer zones and connectivity conservation and I.70
- definition III(1).32
- exemptions III(1).383
- Habitats Directive I.242
- invasive alien species (IAS) and I.122
- precautionary principle and III(1).388
- protected areas legislation, how to address III(1).384-385, III(2).191
- reduction or declassification of protected area status and III(1).160
- TPBA cooperation agreements IV.106-108
- UNCLOS 206 and III(2).76

environmental sustainability I.27

Millennium Goal 7 I.28

equity: see social equity and justice in relation to protected areas

establishment and designation of MPAs III(2).188-205: see also establishment and designation of protected areas (general)

adaptive management III(2).212-213

application of protected areas management categories system III(2).44-45, III(2).191: see also marine and coastal protected areas (MPAs), institutional arrangements, protected area management categories (IUCN, 2008)

boundaries, need for clarity III(2).204: see also boundaries and zones, demarcation, MPAs

buffer zones III(2).161(c), III(2).161(f), III(2).211

compliance with primary conservation objectives III(2).191

connectivity, importance of III(2).193

design criteria III(2).190, III(2).193

determination of governance approach III(2).191, III(2).191

highly protected areas/zones, need for III(2).197-198

interim protection III(1).220(h), III(2).194-196

participation in decision making III(2).199-202

perpetual integrity III(2).193

precautionary principle III(2).193, III(2).196

scale/size considerations III(2).189-190

science-based analysis III(2).192

sustainable use/development, prospects for/EIA III(2).190

establishment and designation of protected areas (general) III(1).138-211: see also boundaries and zones, demarcation; compensation for acquisition of rights; interim protection (general); reduction or declassification of protected area status

acquisition of rights III(1).182-190

amendment of boundary, category or purpose III(1).150

applicability to all governance approaches III(1).152

application of and compliance with protected areas management categories system I.83, III(1).138, III(1).140-147, III(1).152

authority/powers of establishment/designation III(1).138, III(1).148-151

conservation of biodiversity as primary objective I.19-20

customary law as basis III(1).149(b)

goals and objectives of overall protected areas system, compliance with III(1).152

international guidelines and III(1).148

legal definition and official record of boundaries III(1).149(d)

legislative endorsement III(1).149(a)

MPAs and requirements for III(2).188-205: see also establishment and designation of MPAs

nomination process III(1).152-156

participation/consultation requirements III(1).153-154

primary and secondary legislation, use of III(1).138

voluntarily conserved areas, special considerations III(1).139, III(1).149(b) and (c), III(1).151, III(1).156, III(1).201-210: see also voluntarily conserved areas/voluntary conservation efforts, special considerations

European Landscape Convention (2000) IV.60-61

parties 60

scope and aims IV.60, IV.60-61

territorial application 60

transboundary corridors IV.61

transboundary landscapes and IV.60-61

European Union (EU): see Habitats Directive (92/43/EEC)

fairness: see social equity and justice in relation to protected areas

FAO

Code of Conduct for Responsible Fisheries (1995) I.276-277

ecosystem approach and I.60

'Marine Protected Areas as a Tool for Fisheries Management (MPAs)' (FAO) (2007) I.278-279

federal states II.21, **Box III(2)-4**, III(1).34, III(1).119, III(1).205, III(2).172, IV.76

Fiji, constitutional provisions on

enforcement, use of honorary officers **Box III(1)-11**

indigenous rights to traditional lands **Box III(1)-2**

traditional compliance and dispute resolution mechanisms III(1).320

Fish Stocks Agreement (1995) (straddling stocks)

precautionary principle I.275, III(2).76

sustainable use/development I.275

fisheries management for sustainable use/development (general) I.274-279: see also marine and coastal protected areas (MPAs); marine and coastal systems, threat to

Code of Conduct for Responsible Fisheries (1995) I.276-277

Fish Stocks Agreement (1995) (straddling stocks) I.275

governance approaches and III(2).184-185

incentives for conservation III(2).184

'Marine Protected Areas as a Tool for Fisheries Management (MPAs)' (FAO) (2007) I.278-279

precautionary principle I.275, I.277

forest and grassland conservation/forest protected areas

applicability of IUCN 2008 definition I.19-21

as carbon sink I.130, I.131

conservation of biodiversity as primary objective I.19-20

designation as protected area, requirements/IUCN guidelines I.20-21

forest areas that may not or are unlikely to qualify for protected area status I.20-21

forest principles (Agenda 21 and Annex 3) I.265, I.271

forests of cultural, spiritual, historical, religious or national importance I.265

Forests and Protected Areas: Guidance on the use of the IUCN protected area management categories (Dudley and Phillips, 2006) I.20-21

global incentives I.131

integration of protected area systems and surrounding areas principle I.265

REDD+ I.131

science-based analysis, need for I.272

sustainable use/development and I.271-273

UNFF I.271-273: see also UN Forum on Forests (UNFF)

France

constitutional provisions relevant to protected areas **Box III(1)-1**

land use planning and nature **Box III(1)-9**

MPAs, legislative approach III(2).13

national protected areas legislation case study (Guignier and Prieur 2010) **Box III(1)-9**, III(2).13

freedom of information: see access to information

freedom of navigation, MPA implications: see shipping controls/freedom of navigation

funds/fund raising

- access to financial reports I.160
- accounting and financial management requirements III(1).398
- Australia's National Parks Fund **Box III(1)-14**
- bioprospecting III(1).402, III(2).235
- challenges III(1).390
- confidentiality considerations II.90, III(1).156, III(1).243
- conservation banking III(1).403-405
- development aid/debt-for-nature swaps III(1).393
- environmental funds III(1).393, III(1).395-398, **Box III(1)-14**
- government funding III(1).390
- incentives for conservation and III(1).392, III(1).399
- land trusts and II.119
- legal controls III(1).398
- management plans, financial feasibility and I.102, III(1).82
- MPAs, special considerations III(2).229-235
- new mechanisms, evaluation (IUCN guidelines) III(1).391-405
- private donations III(1).393, III(1).394
- REDD+ I.131
- South Africa's Marine Living Resources Fund **Box III(2)-11**
- tourism and other user fees III(1).274, III(1).390, III(1).401-405, III(2).232-234

genetic engineering

- Earth Charter (2000) I.208
- 'living modified organism' III(1).31

geodiversity, definition I.11**Global Environment Facility**, ecosystem approach and I.60**Global Transboundary Protected Areas Network** IV.15**Gobi Gurvan Saikhan National Park** **Box II-2**

- good governance:** *see also* access to information; governance approaches; participation in decision making; social equity and justice in relation to protected areas
- Aarhus Convention (1998): *see* Aarhus Convention (1998)
 - CBD Programme of Work and I.148, I.185
 - development of concept I.139-142
 - Durban Action Plan (2004) and II.89
 - Earth Charter (Principle 13) I.268
 - 'good governance' I.141-146
 - human rights, link with I.147
 - international organizations' usage **Box I-4**
 - IUCN I.143
 - IUCN-WCPA Guidelines I.152
 - judicial review I.175
 - legislative objective III(1).52
 - Millennium Declaration (2000) and I.148
 - principles recognized by international organizations I.149, **Table I-3**, I.152
 - sustainable use/development and I.148
 - TBPAs IV.74
 - UNEP guidelines (2010) I.157

- WPC Rec. V.16 and Rec. V.17 I.144, I.150-151
 WSSD Plan of Implementation (2002) and I.148
- governance approaches:** see also indigenous peoples and community conserved areas (ICCAs); voluntarily conserved areas/voluntary conservation efforts, special considerations
- agreements with government II.102-108: see also conservation agreements; easements/covenants running with the land
- Canadian Institute of Governance's report on II.67-68
- CBD and II.73-75
- changes in II.13-16
- continuum of options II.63-68
- flexibility, need for III(1).60
- government (classical approach) II.19-24
- ILO Convention on Indigenous and Tribal Peoples in Independent Countries (1989) II.79-80
- incentives for conservation and II.64
- international conventions and similar instruments relevant to (general) II.71-82
- IUCN governance types II.15-17, **Table II2-1**
- legislative elements for agreements, need for II.102, III(2).161(q)
- locally managed marine areas (LMMA) **Box III(2)-5**, III(2).39, III(2).183, III(2).227
- MPAs: see marine and coastal protected areas (MPAs), institutional arrangements
- negotiating process for agreements II.69-70, III(1).151, III(1).202, III(1).211
- participation in decision making process II.91-92
- private governance: see private protected areas (PPAs)
- protected areas site management authorities and III(1).86
- Ramsar Guidelines on management planning II.77-78/97-8
- resource constraints and II.70
- tenure and: see tenure in relation to land and resource use rights
- UN Declaration on the Rights of Indigenous Peoples (2007) II.81-82
- WHC Operational Guidelines II.76
- Great Barrier Reef** III(1).49, III(2).14, III(2).82, III(2).138, III(2).175, III(2).210, III(2).230
- Guatemala**, constitutional provisions on indigenous rights to traditional lands **Box III(1)-2**
- Gulf of Mexico ('Islands in the Stream')** **Box III(2)-10**
- Guyana**
- constitutional provisions relevant to protected areas **Box III(1)-1**
- WaiWai enforcement powers III(1).327
- Habitats Directive (92/43/EEC):** see also Birds Directive (CD 79/409/EEC); Natura 2000 network
- applicability I.237 frame
- direct effect, ECJ decisions on I.241, III(2).127
- ecological corridors IV.53
- EIAs and I.242
- human activities vs ecology II.237 frame
- management plans and I.95
- objectives I.237 frame
- Sites of Community Importance (SCI) I.238
- Special Areas of Conservation (SACs) I.238, I.239, I.241
- TBPAs and IV.53
- high seas (UNCLOS 86-120)**
- Ad Hoc Open-ended Informal Working Group **Box III(2)-1**, III(2).20
- applicable law III(2).6

- 'Area' (UNCLOS 1(1)(1)) **III(2).67**
 - coastal states' right to exploit in accordance with (UNCLOS 192) **III(2).68, III(2).68**
 - common heritage of mankind principle (UNCLOS 136) **III(2).67**
 - conservation and management of living resources (UNCLOS 116-20) **III(2).64**
 - definition (UNCLOS 86) **III(2).66**
 - ecosystem linkages with marine areas within national jurisdiction **Box III(2)-1, III(2).19-21**
 - freedom of navigation (UNCLOS 87) **III(2).72**
 - freedom of the sea (UNCLOS 87) **III(2).66**
 - International Seabed Authority **III(2).67**
 - measures to control pollution (UNCLOS 194) **III(2).68-69**
 - Mediterranean as **Box III(2)-8, III(2).105, III(2).110-112**
 - 'minerals' **III(2).67**
 - obligation to cooperate on global or regional basis (UNCLOS 197) **III(2).70**
 - OSPAR sites **III(2).121**
 - peaceful purposes, reservation for (UNCLOS 88) **III(2).66**
 - protection and preservation of the marine environment obligation (UNCLOS 192-237) **III(2).68-70**
 - 'resources of the area' (UNCLOS 133) **III(2).67**
 - SPAs, possibility of **III(2).111-112**
- human rights**, good governance and **I.147**
- ICCAs**: see indigenous peoples and community conserved areas (ICCAs)
- ICCROM**, as advisory body to World Heritage Committee **I.200**
- ICOMOS**, as advisory body to World Heritage Committee **I.200**
- ILO Convention 169 on Indigenous and Tribal Peoples in Independent Countries (1989)**: see Indigenous and Tribal Peoples in Independent Countries, ILO Convention 169 (1989)
- IMO (International Maritime Organization)** **III(2).77-86**: see also MARPOL (1973) and Protocol (1978) (special areas)
- control of shipping to prevent pollution **III(2).60**
 - marine protected areas law, relevance for, designation as PSSA or MARPOL special area **III(2).77-78**
 - MEPC (Marine Environment Protection Committee) **III(2).77**
 - PSSAs **III(2).79-83**
- in situ conservation**
- African Convention (revised) XII and **I.221**
 - Agenda 21 and **I.264**
 - CBD 8 **I.182, Box I-6, I.221**
 - community and indigenous involvement (CBD 8(j)) **II.75**
 - definition (CBD 2) **III(1).31**
 - IUCN, 2008 Guidelines **Table I-1, I.44**
 - protected area categories and **I.44, I.76, III(1).140**
 - regional and global collaboration, importance **I.135**
 - Underwater Cultural Heritage Convention (2001) and **Box III(2)-7, III(2).102**
 - Western Hemisphere Convention (1940) and **I.231**
- incentives for conservation**
- African Convention (revised) XVII **I.223**
 - avoidance of abuse **II.95**
 - biosphere reserves **I.244**
 - boundary amendments and **III1.174**
 - CBD Programme of Work (2004) **Box I-6**

- co-management agreements and II.107, III(1).95, III(1).248
 - conservation agreement, inclusion in II.105, III(1).246
 - easements/covenants running with the land and II.113, II.122, III(1).123(b)
 - financial tools III(1).399
 - fisheries management for sustainable use/development III(2).184
 - forest and grassland global initiatives I.131
 - governance approaches and II.64
 - land trusts and II.122, II.124
 - management plan implementation and I.102, III(1).311-312
 - perpetual integrity and I.32, III.246
 - PPAs and II.46, II.51
 - Ramsar Guidelines and II.77
 - REDD/REDD+ I.131
 - voluntarily conserved areas/voluntary conservation efforts and III(1).112, III(1).208, III(1).400
- India**
- ICCA and II.30
 - Indigenous and Community Conserved Areas legal case study (Pathak and Kothari, 2010) II.30, II.32
- indigenous peoples and community conserved areas (ICCAs) II.29-42:** *see also* co-management/shared governance of protected areas; private protected areas (PPAs); voluntarily conserved areas/voluntary conservation efforts, special considerations
- African Convention (revised) (2003) I.223
 - co-management/shared governance II.31, II.98
 - collective ownership II.34
 - community members and landowners/resource owners distinguished II.35
 - 'community'/'community conserved areas', WPC V.26 II.40-41
 - customary and traditional rights II.33-35, III(1).149(b)
 - definitions and characteristics II.29, II.34-35
 - formal protected area status: *see* voluntarily conserved areas/voluntary conservation efforts, special considerations
 - good governance II.73-78
 - governance approaches II.69, III(2).181-185
 - India and II.30
 - 'indigenous peoples' areas' vs 'community conserved areas' (IUCN protected areas categories, 2008) II.32
 - indigenous peoples conserved territories II.39
 - locally managed marine areas (LMMAs): *see* marine and coastal protected areas (MPAs), institutional arrangements
 - MPAs and **Box III(2)-5**, III(2).30, III(2).174
 - PPAs distinguished II.49-51
 - protected area management categories and (IUCN, 2008) II.37-39, II.41-42
 - South American examples **Box II-1**
 - statistics II.30
- 'indigenous peoples' (ILO Convention 169) II.79-80**
- Indigenous Peoples, UN Declaration on the Rights of (2007) (UNDRIP) II.81-82**
- indigenous or traditional peoples:** *see also* mobile peoples
- African Convention (revised) (2003) XVII I.223
 - Akwé:Kon voluntary guidelines on EIAs undertaken by indigenous and local communities III(1).389
 - compliance and dispute resolution mechanisms III(1).320, III(1).382
 - constitutional provisions relating to III(1).10
 - fair and equitable sharing of costs and benefits and I.174

- 'indigenous peoples' II.39
- marine environment and III(2).37-40, III(2).179-184
- protection of indigenous knowledge and traditional rights III(2).161(n and o)
- Ramsar Guidelines for establishing and strengthening local communities and indigenous people's participation in management of wetlands (1999) II.78
- TBPAs and IV.103-104
- traditional rights as tool for conservation outside formally protected areas **Box III(1)-7**
- Indigenous and Tribal Peoples in Independent Countries, ILO Convention 169 (1989) II.79-80**
 - applicability II.80
 - self-identification principle II.80
- inland water protected areas**
 - applicability of IUCN 2008 definition I.22
 - 'catchment' I.22
- institutional arrangements III(1).64-68**
 - accountability, importance III(1).66, III(1).68
 - advisory bodies: see advisory bodies
 - coordination mechanisms: see coordination mechanisms
 - distribution of powers and responsibilities III(1).65, III(1).68
 - examples **Box III(1)-4**
 - factors affecting III(1).64
 - lead protected areas agency: see lead protected areas agency, main requirements
 - ministerial-level responsibility III(1).69-72
 - MPAs III(2).169-175: see also marine and coastal protected areas (MPAs), institutional arrangements
 - pre-drafting review and analysis III(1).7, III(1).21
 - protected areas site management authorities III(1).67
 - site management authorities: see protected areas site management authorities
 - statutory corporations/parastatals: see statutory corporations/parastatals
 - structural options II.51, III(1).66-67
- integration principle I.50, I.55, I.240, I.243, I.265, III(1).114, III(2).158, III(2).214-217, IV.27**
- interim protection (general) III(1).176-180**
 - authority to make/renew declaration, need to specify III(1).179, III(1).180, III(1).220(h)
 - compensation III(1).180(g)
 - coordination mechanisms and III(1).180(e)
 - declaration at time of nomination III(1).138
 - effect on existing practices, need to specify/exclude III(1).180(d)
 - MPAs III(2).194-196
 - object and purpose III(1).176, III(1).178
 - planning authorities, reinforcement measures III(1).180(e)
 - protected areas agency responsibility for measures III(1).178
 - reasons for, need for clear indication of III(1).180(c)
 - time limits III(1).179
- internal waters III(2).54**
- international cooperation: see transboundary protected areas (TBPAs)**
- invasive alien species (IAS) (general) I.114-123**
 - adaptive management and I.105, I.122
 - 'alien species' III(1).32
 - CBD COP VI/23 119-121, I.115

- CBD Guiding Principles (2002) I.120-122
- climate change and I.123, IV.101
- compliance and enforcement I.122
- ecosystem approach and I.63, I.121
- education relating to I.121
- EIAs and I.122
- examples, 'invasive alien species' III(1).32
- GISP report (2007) **Box I-3**
- IAS Guide (2009) I.114, I.115
- increasing risk I.115
- international and transboundary cooperation I.122
- introduction as prohibited activity III(1).268(d)
- legislative provisions to protect against I.116-122
- management plan flexibility I.122, III(1).221(f)
- parties' obligation to address issue (CBD 8(h)) I.119
- precautionary principle and I.110, I.121
- prevention and control tools I.116
- protected areas system and site planning and design I.122
- public awareness, need to promote I.121
- research and monitoring, importance I.121
- risks from I.116
- schedules of IAS threats/provisions for updating schedules I.122
- seriousness of threat I.114-116
- state responsibility and I.121
- subsidiary legislation I.122
- system planning and I.45
- TBPAs and IV.101
- three-stage approach (prevention, early detection, rapid response) I.121
- 'Islands in the Stream' (Gulf of Mexico) Box III(2)-10**
- Italy**, National Park of the Ampezzo Dolomites II legal case study (Lorenzi and Borrini-Feyerabend) II.70
- IUCN Guidelines for Protected Areas Legislation (IUCN 2010)***
 - audience Intro 10-15
 - generic terms Intro 32-33
 - organization and structure Intro 34-43
 - purpose Intro 9, Intro 10-15
 - scope Intro 16-20
 - sources Intro 21-31
 - as work in progress Intro 44-45
- Jakarta Mandate on Marine and Coastal Diversity (CBD II/10) III(2).89**
- judicial review/appeal against administrative decisions**
 - co-management agreements II.107, III(1).248
 - good governance and I.175
 - legal status of management plans and I.101
 - standing of individuals and NGOs I.176
- Kaa-lya del Gran Chaco National Park (Bolivia) Box II-1**
- Kayan Mentarang National Park (Indonesia) (Dayaks) Box II-2**
- Korea:** see South Korea

Kuururjuaq Park (Canada) (Naskapi people) Box II-2**land trusts**

- Australian practice (National Strategy for the Conservation of Biological Diversity) II.120
- easements/covenants running with the land and II.115, II.119
- incentives for conservation and II.122, II.124
- The Nature Conservancy (TNC) II.125
- NGOs/private conservation and II.117-125
- operation II.118
- UK practice (National Trust/RSPB) II.120
- US practice (including Land Trust Alliance) II.121-125, **Box II-4**

land use planning and environmental protection laws as tool for protection of conservation values III(1).125, Box III(1)-7, III(1).131-137

- Agenda 21 endorsement III(1).132
- buffer zones and connectivity conservation III(1).228, III(1).230
- compensation for acquisition of rights and 191
- examples **Box III(1)-9**
- inclusion of sites and management zones on land use planning maps III(1).220(j)
- land use zoning vs protected area designation III(1).136-137
- management plans (protected areas) III(1).221(o)
- public interest and I.32, **Box III(1)-2**, III(1).125, III(1).137
- recognition of role in protection of conservation values III(1).134
- variety of approaches III(1).132-133

Law of the Sea Convention (1982) (UNCLOS)

- contiguous zone (UNCLOS 33) III(2).57
- continental shelf (UNCLOS 76-85) III(2).61-65: *see also* continental shelf (UNCLOS 76-85)
- EEZ: *see* EEZ (exclusive economic zone) (UNCLOS 55-75)
- global and regional cooperation obligation (UNCLOS 197) III(2).76
- high seas (UNCLOS 86-120) III(2).66-68: *see also* high seas (UNCLOS 86-120)
- internal waters III(2).52, III(2).54
- marine protected areas law, relevance for I.275, III(2).52-53, III(2).68, III(2).76
- objectives III(2).51, III(2).51 frame
- ocean zones, summary III(2).55
- precautionary principle I.111
- science-based decision making (UNCLOS 61(2)/UNCLOS 200-1) III(2).76
- TBPAs (UNCLOS 197) III(2).76, IV.33, IV.49-51
- territorial sea (UNCLOS 2-32): *see* territorial sea (UNCLOS 2-32)

lead protected areas agency, main requirements III(1).73-75

- answerability to minister III(1).74, III(1).75(b)
- avoidance of entity with non-complementary primary objectives III(1).75(e)
- clarity as to functions, duties and powers to ensure accountability III(1).75(c), III(2).43
- consultation on legislative objectives III(1).54
- effective mandate and competence III(1).73, III(1).75(a)
- existing protected areas institution, preference for III(1).73
- lead authority (MPAs): *see* marine and coastal protected areas (MPAs), institutional arrangements, lead authority
- measurement of head of agency's performance III(1).75(d)
- statutory corporation as III(1).73
- umbrella approach, pros and cons III(1).74

Legal Principles for Environmental Protection and Sustainable Development (WCED 1982) I.261

legal proceedings III(1).379

legal status of land or sea considered for designation as protected area III(1).119-126

- alternatives where designation as protected area not possible III(1).124
- capacity to hold legally recognized property rights **Box** III(1)-7
- classification of property rights and interests **Box** III(1)-7
- legislative clarity, need for III(1).119
- mixed tenure/resource rights III(1).122
- public land under jurisdiction of another government entity III(1).121
- public lands and marine areas III(1).120
- rights not amounting to ownership III(1).123(d), **Box** III(1)-7

legislative drafting, pre-drafting review and analysis (general) III(1).5-23

- amendment vs new law III(1).23
- constitutional provisions III(1).7, III(1).8-10: *see also* constitutional provisions relevant to protected areas
- consultation requirements III(1).22, III(2).134, III(2).136
- laws and institutions relevant for protected areas III(1).7, III(1).21
- national policies and laws III(1).7, III(1).17-20, III(2).133-134, III(2).139-142: *see also* national policies and laws relevant to protected areas, review and analysis
- precedents, examination of III(1).6, III(2).135
- stand-alone law vs omnibus legislation III(1).23, III(2).137-138, IV.73
- treaty obligations III(1).7, III(1).11-19: *see also* treaty obligations, implementation

legislative provisions on application of protected areas law III(1).35-39, III(2).236

- consolidation of related provisions in other laws III(1).38
- coordination and consultation in case of overlap, provision for III(1).40
- express repeal/revision of other laws III(1).37
- harmonization III(1).39, III(2).236
- implied repeal III(1).36
- other related legislation, identification and recommendations to ensure compatibility III(1).33
- territorial applicability III(1).34
- umbrella environmental legislation provisions III(1).35

legislative provisions on definitions III(1).24-32

- definitions derived from substantive provisions in legislation III(1).28
- dictionary meaning, sufficiency III(1).26
- examples of definitions of key terms III(1).29, III(1).31-32, III(1).51, III(1).196
- generally accepted foundation terms III(1).29
- international law and policy, adoption of definitions used in III(1).27, III(1).30-32
- limitation to terms having special meaning III(1).26
- over-definition, problems of III(1).26
- replacement of old terms III(1).26
- scope and purpose III(1).24
- substantive matter, exclusion III(1).25
- terms in 2008 IUCN definition of protected areas further defined **Table I-1**

legislative provisions on objectives, key elements for consideration III(1).48-63, III(1).57(d), III(2).161(k)

- access to information III(1).62
- compliance with international obligations III(1).53, III(1).263, III(2).161
- conservation of nature/ecosystem as priority objective III(1).51
- core principles III(1).62
- ecosystem services and functions III(1).59, III(2).161(d)
- as framework for judicial review, evaluation and protected areas management categories III(1).48, III(1).50, III(2).161

- general nature conservation III(1).57
- good governance III(1).52
- incorporation of treaties/reference to III(1).53
- informed and science-based decision making III(1).51, III(1).61-62
- overview III(1).48-55
- participation in decision making III(1).52
- protection of customary and traditional rights and practices III(2).161(n and o)
- provision of non-material benefits III(1).52, III(1).60
- provision of on/off-site goods and services III(1).52
- scientific, economic and cultural information as basis for III(1).50
- social equity and justice in relation to protected areas III(1).62
- social and governance objectives III(1).60
- targeted nature conservation objectives III(1).58
- targets, inclusion in III(1).50
- liability**
 - corporate liability III(1).378, **Box III(1)-13**
 - strict liability III(1).350, III(1).356, III(1).371, III(1).375-377
- local communities**
 - importance of working with I.26
 - voluntarily conserved areas and I.24-25
- local government role** II.21, II.57, III(1).67, III(1).104, III(2).13, III(2).41, III(2).227
- long term conservation:** see perpetual integrity
- Madrid Action Plan for Biosphere Reserves (2008)**, ecosystem approach and I.60, I.252, III(1).193-194
- Malawi**, constitutional provisions relevant to protected areas **Box III(1)-1**
- Mali**, pastoral laws and codes **Box II-2**
- management by conservation objectives** I.72-75: see also legislative provisions on objectives, key elements for consideration
 - 2008 IUCN definition/explanation of terms and I.72
 - measurable objectives I.74
 - monitoring and evaluation I.74, III(1).220(k), III(2).161
 - nature conservation as priority objective I.73
 - objectives as basis for assigning management category I.75-78
 - specific ad hoc conservation objectives I.73-75
- management plans** I.91-95
 - adaptive management III(1).220(i): see also adaptive management
 - authority responsible for preparing plan and managing consultation and approval process III(1).220(a)
 - biosphere reserves and I.95, I.248, III(1).200, III(1).213
 - CBD Programme of Work (2004) endorsement of need for I.93
 - compliance and enforcement measures and I.101
 - content, key elements I.97-98, I.101, III(1).214, III(1).221, III(1).282-284
 - coordination mechanisms, need for III(1).220(c)
 - definition I.92, III(1).214, III(1).221
 - elements for legislation (general) I.96-102, III(1).212-223
 - flexibility to cope with climate change, need for III(1).172
 - Habitats Directive I.95
 - interim protection measures III(1).220(h), III(2).194-196

legal status of plan I.100-101
 legislative requirement for I.91
 maps, need to prepare as part of I.98, III(1).220, III(1).224, III(2).161
 modification in response to long-range changes I.105
 monitoring and evaluation III(1).220(k)
 preparation of plan including public participation I.91, III(1).220, III(1).222
 programme/action plans I.98
 protected area authorities' role in relation to I.97, I.100, I.101, I.122, III(1).220(a)
 regulatory effect III(1).266
 resource allocation and I.91
 review and updating III(1).220(l)
 science-based analysis, need for I.93, I.272, III(1).221(g)
 scope and purpose I.91, III(1).239
 site plan for each protected area or cluster of areas III(1).213
 stages of preparation I.91
 submission of plan map for inclusion on land use planning maps III(1).220(j)
 voluntarily conserved areas and: see voluntarily conserved areas/voluntary conservation efforts, special considerations
 WHC Operational Guidelines (2008) and I.94, III(1).213
 zoning possibility III(1).220(f), III(1).224, III(2).161(p)

Mapu Lahual indigenous protected areas (Chile) Box II-1

Marine and Coastal Diversity, CBD Programme of Work (MPAs) (Dec. IV (1998)/Dec. VII/5 (2004)) (general) III(2).88-91, III(2).141, III(2).160, III(2).190, III(2).193

CBD Programme of Work (MPAs), programme element 3 **Box III(2)-6**
 definitions I.18, III(2).150, III(2).153
 design criteria III(2).193
 ecosystem approach III(2).159, III(2).216
 functioning III(2).153
 marine protected areas legislation, relevance for III(2).90-94
 scientific criteria for identifying ecologically or biologically significant marine areas in need of protection (CBD Dec. IX/20 (2008), Annex I), summary of provisions **Table III(2)-3**, III(2).159, III(2).190, III(2).213
 scientific criteria for identifying valuable marine areas for protection (CBD Dec. IX/20 (2008), Annex I) **Table III(2)-3**, III(2).92-94, III(2).192
 scientific guidance for selecting representative network (CBD Dec. IX/20 (2008), Annex II) **Table III(2)-3**, III(2).92-94, III(2).159, III(2).190, III(2).213
 sustainable use/development III(2).159
 TPBAs and **IV.33**, **IV.38**

marine and coastal protected areas (MPAs) III(2).1-238 (Part III ch 2): see also Baltic Sea Convention (1992) (Helsinki Convention), Helsinki Convention–OSPAR joint work programme on MPAs; MARPOL (1973) and Protocol (1978) (special areas); Natura 2000 network, marine protected areas in the EEZ; OSPAR (1992), MPA networks (OSPAR Recommendation 2003/3); Ramsar List of Wetlands of International Importance; Regional Seas Programme (1974)

Ad Hoc Technical Expert Group (MPAs) I.18
 adaptive management and III(2).25, III(2).183, III(2).212-213
 Agenda 21 (Chapter 17) I.270, III(ii).139
 areas beyond national jurisdiction (high seas) **Box III(2)-1**, III(2).19-21: see also high seas
 boundary demarcation problems III(2).203-205
 as carbon sinks I.130, I.131, III(2).4, III(2).161(g)
 coastal vs deepwater areas III(2).154-156
 community conserved areas **Box III(2)-5**, III(2).30, III(2).37-40
 compliance and enforcement III(2).32, III(2).224-228: see also compliance and enforcement

- conservation-focused and extractive use sites distinguished I.17
- definitions **Table I-1**, I.16-18, **III(2)**.145-153
- establishment, special considerations: see establishment and designation of MPAs
- evaluation of effectiveness, objectives as basis **III(2)**.161
- exceptionally large areas (including EEZ) **Table III(2)-1**, **III(2)**.18, **III(2)**.22, **III(2)**.224: see also EEZ (exclusive economic zone) (UNCLOS 55-75)
- freedom of navigation (UNCLOS), implications **III(2)**.72-75: see also shipping controls/freedom of navigation
- funds/funding **III(2)**.229-235
- Guidelines for Marine Protected Areas* (Kelleher, 1999) **III(1)**.16, **III(2)**.24
- highly protected areas/zones **III(2)**.197-198
- historical development **Box Intro-1**, **III(2)**.7-8810
- identification of biodiversity as priority (1994) I.18
- importance/need for incremental approach **Box III(2)-3**, **III(2)**.24, **III(2)**.159
- institutional arrangements: see marine and coastal protected areas (MPAs), institutional arrangements
- international obligations **III(2)**.50-88129: see also Law of the Sea Convention (1982) (UNCLOS)
- island states and **III(2)**.12
- legislative approaches **III(2)**.11-16
- management: see marine and coastal protected areas (MPAs), institutional arrangements
- 'Marine Protected Areas as a Tool for Fisheries Management (MPAs)' (FAO) (2007) I.278-279
- networks, importance of IUCN plan of action (2009) I.48
- objectives of marine networks and sites **III(2)**.158-886, **III(2)**.211, **III(2)**.214-217
- OCCABAMS and **III(2)**.124-126
- participation in decision making **III(2)**.199-202
- protected area management categories (IUCN 2008) for I.85, **III(2)**.44-48, **III(2)**.134, **III(2)**.207
- PSSAs: see IMO (International Maritime Organization), PSSAs
- regulated activities: see regulated activities/regulations (general); regulated activities/regulations (MPAs)
- right of establishment under UNCLOS **III(2)**.71
- strategic planning and **III(2)**.163-168
- sustainable fisheries management and I.278-279, **III(2)**.158
- traditional tenure and resources rights regimes **Box III(2)-5**, **III(2)**.30
- Underwater Cultural Heritage Convention (2001) and **Box III(2)-7**
- WCMC statistics (2009) **III(2)**.10
- World Heritage sites: see World Heritage Marine Programme (2005)
- WPC V.22 objectives **III(2)**.158
- WSSD Plan of Implementation (2002) I.270, **III(2)**.158
- zoning **III(2)**.197-198, **III(2)**.208-210
- marine and coastal protected areas (MPAs), examples**
- Bight Marine Park **Box III(2)-4**, **III(2)**.29, **III(2)**.43, **III(2)**.172
- Great Barrier Reef **III(1)**.49, **III(2)**.14, **III(2)**.82, **III(2)**.138, **III(2)**.175, **III(2)**.210, **III(2)**.230
- Gully Marine Protected Area, Canada, case study (VanderZwaag and Macnab 2010) **III(2)**.14, **III(2)**.220, **III(2)**.225
- Prince Edward Islands Marine Protected Area **Box III(2)-2**, **III(2)**.22
- Solitary Islands **III(2)**.43
- South Pacific **Box III(2)-5**, **III(2)**.30, **III(2)**.39
- marine and coastal protected areas (MPAs), institutional arrangements** **III(2)**.169-187: see also fisheries management for sustainable use/development
- advisory committees **III(2)**.186-187, **III(2)**.202
- analysis and review as basis **III(2)**.136(e)
- best practice management principles and **III(2)**.13, **III(2)**.190
- CBD Programme of Work (2004), need for integrated management **III(2)**.216
- coordination mechanisms **Box III(2)-4**, **III(2)**.29, **III(2)**.176-180

- existing vs new mechanisms III(2).178
 - governance approaches III(2).178, III(2).181-185
 - Gulf of Mexico ('Islands in the Stream'), connectivity and **Box III(2)-10**
 - indigenous or traditional peoples and III(2).179-180
 - integration principle III(2).158, III(2).214-217
 - lead authority III(2).170-175
 - locally managed marine areas (LMMAs), South Pacific example **Box III(2)-5**, III(2).39, III(2).183, III(2).227
 - mixed jurisdictions, example (Great Australian Bight Marine Park) **Box III(2)-4**
 - multiplicity of institutions and stakeholder interests III(2).41-43, III(2).199-202, III(2).225
 - protected area management categories (IUCN, 2008) III(2).44-48
 - special challenges III(2).36-49
 - Wadden Sea as example of transboundary MPA III(2).217, **Box IV-3**
- marine and coastal protected areas (MPAs), pre-drafting review and analysis** III(2).132-136: *see also* legislative drafting, pre-drafting review and analysis
- conflicting legislation, identification and harmonization/peal III(2).177, III(2).236
 - consultations III(2).134, III(2).136-138
 - institutional arrangements including governance approached III(2).136(e)
 - legislative alternatives, stand-alone law vs omnibus legislation III(2).137-138
 - marine and oceans policy, existing and required III(2).133-134, III(2).139-142
 - sites needing urgent protection on an interim or temporary basis pending legislation III(2).136(f)
 - special scientific and technical information requirement III(2)..136
 - vision, mission, goals and objectives for envisioned MPA network III(2).134
- marine and coastal systems, threats to:** *see also* connectivity (marine environment)
- climate change III(2).25, III(2).35
 - development pressures (coastal zone) III(2).34
 - Jakarta Mandate on Marine and Coastal Diversity (CBD II/10) III(2).89
 - as matter of special concern (CBD Dec. I/9 (1994)) I.18, III(2).89
 - Millennium Ecosystem Assessment (2005) III(2).3
 - overview I.Intro 4, III(2).31-35
 - primitive state of knowledge relating to III(2).23-24
 - unsustainable fishing III(2).33
 - WSSD Declaration I.269
- Marine Environment Protection Committee (MEPC)** III(2).77: *see also* IMO (International Maritime Organization)
- marine pollution:** *see also* connectivity (marine environment); IMO (International Maritime Organization); MARPOL (1973) and Protocol (1978) (special areas); shipping controls/freedom of navigation
- control of shipping in the EEZ/high seas and III(2).60, III(2).72-75: *see also* IMO (International Maritime Organization); shipping controls/freedom of navigation
 - definition (UNCLOS 1(1)) III(2).69
 - land-based sources 34, III(2).25
 - large marine ecosystems and III(2).27
 - measures to prevent, reduce and control (UNCLOS 194) III(2).68-69
- MARPOL (1973) and Protocol (1978) (special areas)** III(2).84-86
- definition III(2).85
 - designation III(2).77-78
 - evaluation ('Gulfs' area) III(2).86
 - Guidelines (2001) III(2).85
 - level of protection III(2).85
 - list **Table III(1)-2**
 - MARPOL coverage III(2).84

Marshall Islands, constitutional provisions on indigenous rights to traditional lands **Box III(1)-2**

Mauritania, pastoral laws and codes **Box II-2**

Mediterranean Regional Seas Programme III(2).105

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (2004) **III(2).105**

Convention for the Protection of the Mediterranean Sea Against Pollution (1976) (Barcelona Convention) **III(2).105**

Mediterranean Action Plan **III(2).105**

Mediterranean as high seas **III(2).111**

Mediterranean Specially Protected Areas (SPA) Protocol (1982) **III(2).110**

SPA and Biodiversity Protocol (1995): see SPA and Biodiversity Protocol (1995)

memoranda of understanding (MOUs)

CMS **Table I-5**

as CMS implementing agreements **I.214-216**

legal status **I.214, IV.90**

Sulu-Sulawesi Marine Ecoregion MOU (2004) **Box IV-4**

migratory species

definition **III(1).31**

transboundary cooperation and **I.137, I.227**

Migratory Species of Wild Animals Convention (1979) (CMS)

ACCOBAMS: see ACCOBAMS

agreements (CMS IV), guidelines for (CMS V) **I.212**

agreements concluded under CMS **I.216**

CBD–CMS Joint Work Programme (CMS Res. 8.18) **I.213**

conclusion, entry into force and parties **I.210** frame

endangered species (CMS III Appendix I) **I.210**

as framework agreement **I.210, I.214**

memoranda of understanding **Table I-5**

migratory species conserved through Agreements (CMS IV and Appendix II) **I.211**

objectives **I.210** frame

precautionary principle **I.110**

protected areas law, relevance for **I.213-216**

'Range State' (CMS I.1(h)) **I.215**

TBPAs and **IV.31, IV.33, IV.46-48**

treaties **Table I-4**

Millennium Declaration (2000), good governance and **I.148**

Millennium Development Goal 7 (environmental sustainability) I.28

Millennium Ecosystem Assessment (2005)

ecosystem approach and **I.63**

marine and coastal systems, threat to **III(2).3**

mitigation measures

climate change **I.128-132**

precautionary principle and **III(1).388**

reduction or declassification of protected area status **III(1).161-162**

mobile peoples and protected areas

ancestral lands, right to use **Box II-2**

CBD Programme of Work (2004) and **Box II-2**

- definition **Box II-2**
- examples **Box II-2**
- legislative provision for, importance **Box II-2**
- management/co-management schemes, participation in **Box II-2**
- overlapping rights **Box II-2**
- participation in decision making and **Box II-2**
- transboundary migration, TBRs **Box II-2**
- World Alliance of Mobile Indigenous Peoples **Box II-2**
- Mongolia (Gobi Gurvan Saikhan National Park) Box II-2**
- MPA networks (OSPAR Recommendation 2003/3) III(2).120-121**
 - beyond OSPAR-nominated Natura 2000 areas **III(2).121**
 - Charlie Gibbs Fracture Zone **Box III(2)-9**
 - deepwater areas, EEZ and the high seas **Box III(2)-9, III(2).121**
 - guidelines for selecting **Box III(2)-9**
 - habitats and ecological processes **Box III(2)-9, III(2).161(e)**
- multiple-use sites**
 - 75 per cent rule **I.84, III(2).47**
 - integration principle **III(2).214**
 - MPAs **III(2).46-47**
 - protected area management categories (IUCN, 2008) and **I.84**
- national policies and laws relevant to protected areas, review and analysis III(1).7, III(1).17-19**
 - constitutional provisions as policy **III(1).43**
 - instruments and decisions with legal effect **III(1).18**
 - interrelationship between policies and laws **III(1).17**
 - laws not protected area specific **III(1).20**
 - marine and oceans policy **III(2).133-134, III(2).139-142**: *see also* marine and coastal protected areas (MPAs), pre-drafting review and analysis, marine and oceans policy
 - national policy statements as sources **III(1).17, III(1).43, III(2).139**
 - policy sources in strategies, action plans and reports **III(1).17, III(2).139**
 - purpose of review **III(1).18**
 - resource specific laws **III(1).19**
 - statement of relevant policy and possible approaches **III(1).40-42, III(1).44, III(2).139**
 - treaties relevant for protected areas and **III(1).43**
 - updating of existing policy **III(1).42**
- Natura 2000 network**: *see also* OSPAR (1992), MPA networks (OSPAR Recommendation 2003/3); SPA and Biodiversity Protocol (1995)
 - buffer zones and connectivity conservation obligations **I.242**
 - Commission's power to make proposals **I.240**
 - criteria **I.238**
 - description **I.237**
 - as Emerald Network sites (Bern Res. 5 (1998)) **I.230**
 - Guidelines for the the marine environment (2007) **III(2).128-129**
 - harm to Natura 2000 site, special circumstances **I.242**
 - integration in land use policies and actions **I.242**
 - marine protected areas in the EEZ **III(2).127-129**
 - Member State obligations pending Commission decision **I.240**
 - obligations **I.241**
 - OSPAR sites and **III(2).121**
 - as part of growing regional response to ecological threat **Intro 7**

- PEEN and **IV.59**
- procedure **I.238**
- purpose of designation **I.239**
- 'natural heritage'** **III(1).31**
- 'natural resources' (UNCLOS 77)** **III(2).61**
- 'nature'**, biodiversity/geodiversity and **I.11**
- Nepal (Sagarmatha (Mt. Everest) National Park)** **Box II-2**
- New Zealand**, MPAs, incremental approach **Box III(2)-3, III(2).24**
- NGOs**
 - land trusts and **II.117-125**
 - standing (legal challenge) **I.176**
 - TPBAs and **IV.105**
 - voluntarily conserved areas and: see private protected areas (PPAs)
- Niger**
 - rural code **Box II-2**
 - W Transboundary Biosphere Reserve **Box II-2**
- Nigeria**, constitutional provisions relevant to protected areas **Box III(1)-1**
- North-East Atlantic Regional Programme** **III(2).106**
- North-East Pacific Regional Programme** **III(2).106**
- North-West Pacific Regional Programme** **III(2).106**
- offences and penalties** **III(1).346-380**: see also authorized officers; burden/standard of proof; civil actions; compliance and enforcement; criminal offences and penalties
 - clarity/ease of understanding, need for **III(1).314**
 - compliance/deterrence and **III(1).314**
 - criminal and civil law distinguished **III(1).347, III(1).363-365, III(1).372**
 - as part of general legal framework **III(1).346, III(1).347**
 - regulated activities, linkage **III(1).256, III(1).314**
 - strict liability **III(1).350, III(1).356, III(1).371, III(1).375-377**
 - TBPAs and **IV.112**
- OSPAR (1992)** **III(2).118-121**
 - Annex V (maritime area protection and conservation measures and requirements) **III(2).119**
 - Commission **III(2).118**
 - Helsinki Convention–OSPAR joint work programme on MPAs **III(2).123**
 - MPA networks (OSPAR Recommendation 2003/3): see MPA networks (OSPAR Recommendation 2003/3)
 - objectives of MPA networks under **Box III(2)-9**
 - 'OSPAR area' **Box III(2)-9**
 - parties **III(2).118**
 - scope and purpose **III(2).118**
 - transboundary protected areas **Box III(2)-9, III(2).121**
- Papāhānaumokuākea Marine National Monument (USA)** **III(2).83**
- Paraguay**, constitutional provisions relevant to protected areas **Box III(1)-1**
- participation in decision making** **I.166-170**: see also access to information; co-management/shared governance of protected areas; good governance; governance approaches; transparency as principle of good governance
 - access to information, role **I.167**

- adaptive management/modifications in response to long-range change I.106
 - biosphere reserves and I.250-251
 - boundaries and zones, demarcation and II.91-92, III(1).173, III(2).205
 - CBD Programme of Work (2004) and I.169-170, I.185
 - constitutional provision for III(1).9
 - designation of protected areas site management authorities and I.168, III(1).87-88
 - Durban Action Plan II.89
 - ecosystem approach and I.55
 - establishment and designation of protected areas and III(1).153-154
 - legislative objectives and III(1).52, III(1).54, III(1).60, III(1).62
 - legislative provision for I.168
 - management plans (protected areas) and I.91, III(1).220(c), III(1).222(a)
 - mobile peoples **Box II-2**
 - MPAs III(2).199-200, III(2).205
 - opportunity to comment effectively, need for I.167-168
 - potential costs of delays caused by I.113
 - PPAs and, confidentiality considerations II.90, III(1).156, III(1).243
 - protected areas authorities and III(1).22
 - Ramsar Guidelines on management planning and III(2).98
 - reduction or declassification of protected area status, powers and procedures III(1).159
 - Rio Declaration (1992) (Principle 10) I.166, I.263
 - stakeholders and other affected parties III(1).22
 - TBPAs IV.102-105
 - voluntarily conserved areas/voluntary conservation efforts I.169-170, II.89-92, III(1).88, III(1).151, III(1).156, III(1).202, III(1).209, III(1).211
- PEEN (Pan-European Ecological Network)**
- buffer zones and connectivity conservation and I.71
 - Council of Europe role IV.56
 - expert committee IV.56
 - implementation IV.59
 - KVIV Ministerial Statement (2003) IV.56, IV.59
 - origin and membership IV.56
 - TBPAs IV.55-59
 - zoning as management tool IV.87
- perpetual integrity**
- conservation agreements and II.106, III(1).246, III(1).252-253
 - easements/covenants running with the land and II.109, II.110, II.113
 - good governance and I.35
 - incentives for conservation and I.32, III.246
 - as key criterion for qualification as protected area I.31, II.106, III(1).157, III(2).193
 - as legal concept I.32
 - 'long-term conservation' and (2008 IUCN definition/explanation of terms) I.31
 - 'perpetuity' I.32
 - reduction or declassification of protected area status and III(1).157
 - voluntarily conserved areas and I.36, I.38
- Peru**
- constitutional provisions relevant to protected areas **Box III(1)-1**
 - national protected areas legislation case study (Solano 2010) III(1).73, III(1).254
 - Vilcanota Spiritual Park **Box II-1**

Philippines

constitutional provisions on indigenous rights to traditional lands **Box III(1)-2**

ICCAs and **II.30**

national protected areas legislation case study (La Viña, Kho, and Caleda 2010) **I.69, II.30, III(1).129, III(2).13**

police, role: see authorized officers

polluter pays principle **IV.63**

precautionary principle **I.108-113**

activities in protected areas requiring written permission **III(1).278**

adaptive management and **I.113**

African Convention (2003) and **I.111**

best available information and **I.113**

CBD preamble **I.110**

Climate Change Convention (1992) **I.111**

constitutional provision for **III(1).9**

definition/circumstances requiring **I.108, I.110-111**

EIAS and **III(1).388**

Fish Stocks Agreement (1995) (straddling stocks) **I.275, III(2).76**

fisheries management for sustainable use/development **I.275, I.277**

Guidelines for Applying the Precautionary Principles to Biodiversity Conservation and Natural Resource Management (IUCN, 2007) **I.112-113, III(1).388**

invasive alien species (IAS) and **I.110, I.121**

IUCN issues paper (Cooney, 2004) **I.112**

Law of the Sea Convention (1982) **I.111**

as legislative objective **III(1).62**

Migratory Species of Wild Animals Convention (1979) **I.110**

mitigation measures **III(1).388**

MPAs and **Box III(2)-9, III(2).193, III(2).196**

OSPAR (1992) **Box III(2)-9**

participation in decision making and **I.113**

prohibited activities and **III(1).270**

protected areas legislation, importance of inclusion in/key elements **I.113**

Rio Declaration (Principle 15) **I.109**

science-based analysis, need for **I.113**

Prince Edward Islands Marine Protected Area **Box III(2)-2, III(2).22**

private protected areas (PPAs) **II.26, II.43-56:** see also indigenous peoples and community conserved areas (ICCAs); land trusts; voluntarily conserved areas/voluntary conservation efforts, special considerations

administration arrangements **II.54-55**

applicability **II.44**

buffer zones and connectivity conservation and **II.44**

co-management/shared governance **II.98**

definitions **II.52-53**

examples **II.3**

for-profit corporations and **I.24, II.13, II.51(d), II.53-54**

governance options **II.69, III(2).182**

ICCAs distinguished **II.49-51**

incentives for conservation and **II.46, II.51**

inclusion in formal protected areas system, options and considerations **II.43-44, II.51-56, Table II-2**

increase in **II.45-46, II.48**

individual landowners, administration arrangements II.54(a)
 integration into national protected area systems II.43-44, II.47-48, **Table II-2**
 NGOs and I.24, II.51(c), II.54(a)
 participation in decision making, confidentiality considerations II.90, II.92-93, III(1).156, III(1).243
 'private' vs 'community' principle II.49
 protected area management categories (IUCN 2008), applicability II.86
 Regional Policy on Private Protected Areas (Central America) (2007) II.55
 tenure in relation to land and resource use rights II.98
 variety of approaches II.44, II.52
 WCC and II.48
 WDPA and II.48

Programme on Protected Areas (IUCN) (PPA)

definition of protected areas used by (IUCN 2008) I.7

protected area management categories: *see also* establishment and designation of protected areas

advantages of use as common framework I.89, III(1).143
 Almeria Conference (2007) and I.86
 assignment of category, guidance **Box III(1)-10**
 categories V and VI, distinguishing features for legal consideration II.88, **Box II-3**
 CBD endorsement of (Dec. VII/28 and Dec. IX/18) I.80, I.89(b), III(1).142
 country-specific applicability I.77
 good governance and I.152
 governance type, relevance I.85, II.12
Guidelines for Protected Area Management Categories (IUCN, 1994) I.5, I.77, III(1).141
 identification and definition of categories III(1).140-151
 'indigenous peoples' areas' vs 'community conserved areas' II.32
 interdependence of categories I.77
 as international system I.87, I.88(c)
 IUCN survey (2003) I.82, **Box I-2**
 legal/legislative basis, need for I.75-78, I.76
 legislative 'objectives' provisions as framework III(1).48
 link to conservation objectives III(1).145
 methodology/order of analysis III(1).144
 modification in response to long-range change I.106
 MPAs I.85, III(2).44-48, III(2).191
 multiple-use sites I.84, III(2).46-47: *see also* multiple-use sites
 as non-hierarchical/universal system I.85, I.88(e), II.86
 PPAs and II.86
 primary conservation objectives as basis for categorization I.75-78, I.87-88, III(1).140, III(1).145
 protected area status, dependence on III(1).138
 Ramsar I.203, I.205, I.208-209, III(1).142
 site-specific legislation and III(1).147
 summary of principles I.88
 terminology, trans-boundary consistency/use of category numbers I.83, I.88(d), III(1).146
 terminology/use of category number III(1).146
 text **Table I-2**, **Table III(1)-1**
 TPBAs IV.24
 unsuitable applications I.86, I.88(g)
 voluntary conservation initiatives with examples II.86-88, **Table II-3**, III(1).240(c)
 WDPA (including UN List of Protected Areas) I.87, III(1).143

World Heritage List I.199-200
zoning and III(1).224

protected areas authorities: *see also* marine and coastal protected areas (MPAs), institutional arrangements; protected areas site management authorities
consultation and collaboration III(1).128
definition in legislation III(1).29
Durban Action Plan (2004) and III(1).29
examples **Box III(1)-5**
legislative clarity on functions, duties and powers, importance III(1).65, III(1).89-90
management plan, role in regard to I.97, I.100, I.101, I.122, III(1).220(a)
overall and individual site authorities distinguished III(1).65, III(1).89-90
powers and responsibilities, key elements I.100-101, I.173-174, III(1).65, III(1).89-90, III(1).278
transparency **Box III(1)-5**
treaty negotiation IV.88

‘protected areas’ as defined by CBD 2

2008 IUCN definition compared I.13
modification by decisions of the CBD Conference of the Parties I.13
national legislation and III(1).31
text I.12

‘protected areas’ as defined by IUCN 1994

incorporation in domestic law, continuing compatibility I.9
IUCN General Assembly resolution GA 19.4 I.5
revision (2008) I.6, III(1).32
text I.5

‘protected areas’ as defined IUCN 2008: *see also* establishment and designation of protected areas; establishment and designation of protected areas (general); fisheries management for sustainable use/development; forest and grassland conservation/forest protected areas; inland water protected areas; marine and coastal protected areas (MPAs); private protected areas (PPAs); sacred sites; voluntarily conserved areas/voluntary conservation efforts, special considerations

Almeira Conference (2007) and I.72
biosphere reserve zones (MAB) I.151.245
‘clearly defined geographical space’ I.10
conservation of nature as main objective I.14
definitions, inclusion III(1).32
economic benefits of designation as II.95
explanation of terms used in definition **Table I-1**
‘formal protected areas system’ and I.24-25, II.2, II.26-28, II.36, II.105-106
general applicability I.15
guiding principles/requirements I.14
incentives for conservation and II.105, II.106
IUCN use of I.7
national legislation and III(1).31, III(1).32
‘nature’ I.11
as preferred definition I.7-8, **Table I-1**, I.16-18, III(2).145-149
Programme on Protected Areas (IUCN) (PPA) and I.7
text I.6, III(2).145
WDPA and I.7

protected areas law and policy: *see also* management by conservation objectives

classic governance approaches as basis II.23-24

protected areas site management authorities: *see also* protected areas authorities

- accountability III(1).68
- clarity of designation, importance III(1).65
- definition of powers and responsibilities, importance of inclusion III(1).84
- governance approaches and III(1).86
- institutional options III(1).67, III(1).85
- ministerial approval, desirability III(1).84
- multiple authorities III(1).82
- overall protected areas authority and III(1).82
- powers and responsibilities with examples I.25, I.90-91, I.129, III(1).87-88, **Box III(1)-5**

protected areas system plan

- adaptive management and, redesign in response to long-range changes I.105-106
- adaptive management and climate change I.53, I.126
- adaptive management (general) I.51, III(1).117
- 'best available scientific data requirement III(1).117, III(1).118
- compliance of new protected area with international obligations III(1).118(e)
- coordination mechanisms and III(1).118(c)
- ecosystem approach and III(1).118(c), III(1).127-130
- forest principles (Agenda 21) I.265
- identification of buffer zones and ecological corridors, inclusion I.52, III(1).128: *see also* buffer zones and connectivity conservation
- identification of gaps and connectivity needs I.51, III(1).117
- integration principle I.55
- invasive alien species (IAS) and I.122
- key elements for legal consideration I.51, III(1).114-137
- legislation extending protection beyond formal protected areas system **Box III(1)-8**
- as legislative requirement, importance I.54, III(1).115
- long-term viability of protected areas in III(1).118(e)
- MAB Network and (WPC Rec. V.9) I.243
- main elements of plan III(1).118(d)
- management: *see* management by conservation objectives; management plans; protected area management categories (including in particular 2008 IUCN-WCPA Guidelines)
- MPAs and III(2).214-217
- as national/macro-level tool I.91
- new government approaches, encouragement III(1).117
- overall purpose and goal of plan I.50, III(1).114, III(1).116
- protected areas established under other legislation I.50, III(1).114
- responsibility for, need to identify III(1).118
- specific sites in plan and III(1).118(e)
- strategic direction I.51, III(1).117
- sustainable development and I.260

PSSAs (particularly sensitive sea areas) III(2).79-83: *see also* IMO (International Maritime Organization), PSSAs

- definition III(2).77
- designation criteria and procedure III(2).80-81
- Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (IMO Assembly A.982(24) (2005)) III(2).80
- list (November 2009) III(2).82
- measures to control maritime activity III(2).81
- Papāhānaumokuākea Marine National Monument (USA), designation and measures adopted III(2).83

public interest

- balance with landowner/rightsholder interests III(1).137, III(1).188
- land use planning and environmental protection laws I.32, Box III(1)-2, III(1).125, III(1).137

Qomolangma National Nature Preserve (China) Box II-2**Ramsar Convention (1971)**

- conclusion, entry into force and parties I.201 frame
- conservation of wetlands through nature reserves, obligation (Ramsar 4.1 and COP Res. 4.4) I.203, III(2).95, III(2).162
- consultations (Ramsar 5) I.207
- ecosystem approach I.59, III(2).97, III(2).216
- formulation and implementation of national land use planning (Ramsar 3.1) I.204, III(2).95
- objectives I.201 frame
- protected areas law, relevance for I.202-207
- responsibility to maintain boundaries of listed wetlands site/deletion or restriction (Ramsar 4.2) I.206
- scope I.201
- sustainable use/development ('wise use') and (Ramsar 3.1) I.204
- TPBAs and IV.18, IV.33, IV.39-41
- 'wetlands' (Ramsar 1) III(1).31, III(2).96

Ramsar Guidelines

- connectivity III(2).26
- ecosystem approach I.59, III(2).97
- establishing and strengthening local communities and indigenous peoples' participation in the management of wetlands (Res. VII.8 (1999)) II.78
- incentives for conservation and II.77
- management planning for Ramsar sites and other wetlands (Res. VIII.14 (2002)) II.77, III(2).97-98
- marine protected areas legislation, relevance for III(2).96-98
- participation in decision making III(2).98

Ramsar List of Wetlands of International Importance

- boundaries and zones, demarcation I.206
- criteria for inclusion I.202
- deletion or restriction ('no-net loss') (Ramsar 4.2) I.206
- designation obligations (Ramsar 2.1) I.202
- 'international importance' status I.205
- obligations following listing (Ramsar 3.1) I.204
- protected area management categories (IUCN), relationship I.203, I.208-209, III(1).142
- Ramsar Res. IX.22 I.205
- transboundary sites Table IV-1

recreational activities, regulation of III(1).300-306

- adaptive management and III(1).303-306
- CBD guidelines on sustainable tourism III(1).304
- education of visitors, need for III(1).301
- forest and grassland conservation/forest protected areas I.20
- human activities vs ecology III(1).300-306
- MPAs III(2).221
- overuse III(1).300
- promotion of educational and recreational opportunities III(2).161(k)
- promotion of sustainable use III(1).302
- science-based analysis and III(1).303
- sustainable use/development and III(1).302-304, III(2).221
- World Heritage Tourism Programme III(1).3(1).304

Red Sea and Gulf of Aden Regional Programme III(2).106

REDD/REDD+ (UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) I.132

reduction or declassification of protected area status III(1).157-166

- absence of viable alternative III(1).160
- constitutional conflict/challenge III(1).158
- key legal considerations (general) III(1).158-160
- ministerial statement of reasons for III(1).160
- mitigation measures ('no-net loss') III(1).161-162
- participation/consultation III(1).159
- perpetual integrity and III(1).157
- science-based analysis III(1).160
- social and environmental impact III(1).160
- state-owned/state-controlled protected areas III(1).158
- voluntarily conserved areas, special considerations III(1).163-166
- WCC Res. 4.087 (2008) III(1).162

Regional Organization for the Protection of the Marine Environment Marine Emergency Mutual Aid Centre (ROPME) III(2).86, III(2).106-107

Regional Seas Programme (1974) III(2).104-109

- Black Sea Regional Seas Programme III(2).117
- Caribbean Regional Seas Programme III(2).115-116
- East African Regional Seas Programme III(2).113-114
- Mediterranean Regional Seas Programme **Box III(2)-8, III(2).105, III(2).110-112**
- participating countries III(2).106
- programmes established other than under UNEP auspices III(2).105
- programmes established under UNEP auspices III(2).105
- regional conventions adopted under, protocols addressing specific issues III(2).108-117

regulated activities/regulations III(1).254-313: see also civil actions; criminal offences and penalties; offences and penalties; regulated activities/regulations (MPAs)

- activities allowed by general rules without written permission III(1).258, III(1).273-283, III(1).277, III(1).284-291
- Agenda 21 I.264
- authorized officer for enforcement of III(1).322-345
- category V and VI areas, special considerations III(1).293-294
- compliance and enforcement: see compliance and enforcement
- concessions III(1).276-277
- consistency with conservation objectives, need for III(1).274
- consistency with protected area category and management plan, need for III(1).273
- dissemination arrangements III(1).291, III(1).411
- drafting techniques/ease of understanding III(1).288, III(1).314
- EIA and III(1).283
- emergencies: see emergency and incident management
- examples of general rules III(1).289-292
- exemptions to application of III(1).267, III(1).272-273
- fees for permitted activities III(1).285
- funds and funding III(1).390-405
- general vs specific provisions III(1).257, III(1).305-306
- implementation considerations III(1).278-283
- inclusion as part of legislative process package III(1).256
- measures to improve coordination in emergencies III(1).310

- power/responsibility for I.101, III(1).255, III(1).273, III(1).278
 - precautionary principle and III(1).270
 - prohibited activities (general) III(1).258, III(1).259, III(1).268-272
 - recreational activities: see recreational activities, regulation of
 - repeal/revision III(1).413-415
 - responsibility of protected areas authority I.101, III(1).273, III(1).278
 - schedules III(1).416
 - specific regulations for individual sites III(1).286, III(1).288
 - time limits for issue of regulations III(1).410
 - timeliness/focus on priority needs III(1).256
 - transitional provisions III(1).412
 - voluntarily conserved areas, special considerations III(1).295-299, III(1).319-331
- regulated activities/regulations (MPAs, special considerations) III(2).218-223: see also regulated activities/regulations (general)**
- activities authorized by permit or other written document III(2).220
 - activities authorized by public notice III(2).219
 - bioprospecting III(2).222
 - fees for permitted activities III(2).220
 - international law obligations and III(2).219
 - object and purpose, conservation objectives III(2).218
 - strict prohibition III(2).219
 - tourism, elements for inclusion III(2).221
- repeal of protected areas legislation III(1).413-415**
- Rio Declaration on Environment and Development (1992) I.262-265**
- Agenda 21: see Agenda 21
 - forest principles I.265, I.271
 - participation in decision making (Principle 10) I.166, I.263
 - precautionary principle (Principle 15) I.109
 - sustainable use/development, environmental, social and economic pillars I.262
- ROPME III(2).86, III(2).106-107**
- sacred sites**
- applicability of IUCN 2008 definition I.23
 - biodiversity conservation and I.23
 - cultural/spiritual values, balance I.23
 - forest principles (Agenda 21) I.265
 - MPAs and III(2).7, III(2).161(m), III(2).219
 - protection of as objection III(1).60(c), III(2).161(m)
- Sagarmatha (Mt. Everest) National Park (Nepal) Box II-2**
- science-based analysis, need for**
- activities requiring written permission III(1).278
 - advisory bodies, expertise III(1).100
 - boundaries and zones, demarcation III(1).117(d), III(1).173-174
 - climate change vulnerability III(1).221(g)
 - management plans I.93, I.272, III(2).212-213
 - MPAs III(2).136, III(2).158, III(2).192, III(2).212-213
 - precautionary principle and I.113
 - protected area objectives III(1).51, III(1).61-62
 - recreational activities in protected areas III(1).303

- reduction or declassification of protected area status, powers and procedures **III(1).160**
- statutory corporations, expertise **III(1).79**
- technical definitions and **III(1).25**
- UNCLOS 61(2)/UNCLOS 200-1 **III(2).76**
- sea, definitions**
 - airspace above the sea **III(1).29, III(1).180(b)**
 - seabed, subsoil and water column **I.10, III(1).29, III(1).180(b), III(2).58**
- Seville Strategy:** see biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves, Seville Strategy and Statutory Framework (SF) (1995)
- shipping controls/freedom of navigation**
 - EEZ/high seas (UNCLOS 58/UNCLOS 87) **III(2).72**
 - major damage or threat of (UNCLOS 220(6)) **III(2).74**
 - right to regulate in accordance with IMO standards **III(2).60, III(2).75**
 - territorial sea (innocent passage), coastal states' rights and limitations (UNCLOS 21) **III(2).56, III(2).73-74**
- site management authorities:** see protected areas site management authorities
- Slovenia,** constitutional provisions relevant to protected areas **Box III(1)-1**
- social equity and justice in relation to protected areas I.171-176:** see *also* judicial review/appeal against administrative decisions
 - agreement in writing between government and other parties, desirability, free, prior and informed consent, need for **I.174**
 - balancing a variety of interests **I.172**
 - CBD Programme of Work on Protected Areas (2004), Element 2 **I.185**
 - constitutional provision for **III(1).9**
 - default on commitments, consequences **II.95**
 - definition in relation to conservation and protected areas **I.171**
 - incentives for conservation and **II.93**
 - as legislative objective **III(1).60, III(1).62**
 - participation in decision making **I.173, IV.103**
 - protected authorities' obligation to ensure **I.173-174, II.93-95**
 - recommended elements **I.173-176, II.93-95**
 - TPBAs **IV.103**
- social sustainability I.27**
- socio-economic development including sustainable use and conservation, balance I.26, I.51, I.103, I.249, III(1).1, III(1).32, III(1).155(e), III(1).221(e), III(1).380, III(1).386, IV.10**
- South Africa**
 - conflict resolution mechanisms **III(1).110, Box III(1)-6**
 - constitutional provisions relevant to protected areas **Box III(1)-1**
 - Marine Living Resources Fund **Box III(2)-11**
 - MPAs, legislation **III(2).13**
 - national protected areas legislation case study (Paterson 2010) **III(1).28, III(2).13**
 - offshore MPAs (Prince Edward Islands) **Box III(2)-2, III(2).22**
- South Asian Regional Seas Programme III(2).106**
- South Korea**
 - biological corridor legal framework for Baekdu Daegan Mountain System case study **I.69, III(1).235**
 - buffer zones and connectivity conservation, alternative approaches **III(1).234-235**

South Pacific

Fiji III(2).39

locally managed marine areas (LMMAs) **Box III(2)-5, III(2).30, III(2).39, III(2).183****South-East Pacific**

regional convention III(2).107

Regional Seas Programme III(2).106

SPA and Biodiversity Protocol (1995) III(2).110-112

areas 'partly or wholly on the high sea', eligibility III(2).111-112

'biological diversity' (CBD definition) III(2).110

criteria for SPAMI status III(2).110

parties (October 2009) III(2).112

Pelagos Sanctuary **Box III(2)-8****'space' (2008 IUCN definition)**

airspace as I.10, III(1).29

surface area of designated land or water body I.10

water column and seabed as I.10

special areas: see MARPOL (1973) and Protocol (1978) (special areas)**Special Areas of Conservation (SACs):** see Habitats Directive

standing (legal challenge)

individuals I.176

NGOs I.176

state responsibility, invasive alien species (IAS) and I.121**statutory corporations/parastatals III(1).76-81**

accountability III(1).76

board of directors, key considerations III(1).78-81

corporate status III(1).81

functions, powers and responsibilities III(1).80, **Box III(1)-5**

government agencies compared III(1).80

independence III(1).76

multiple vs single entity III(1).77

Statutory Framework of the World Network of Biosphere Reserves: see biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves, Seville Strategy and Statutory Framework (SF) (1995)**Stockholm Declaration and Principles (1972) I.256**

foundation principles I.256

strict liability III(1).350, III(1).356, III(1).371, III(1).375-377**sustainable use/development:** see also fisheries management for sustainable use/development; WSSD Plan of Implementation (2002)

African Convention (revised) VI I.220, I.224

biosphere reserves I.248, III(1).195

category V and VI areas III(1).292-294

CBD and III(1).31, III(2).159

constitutional provision for III(1).9

definition (CBD 2) III(1).31

definition (WCED 1987) I.27

Earth Charter (2000) and I.266

environmental, social and economic pillars of I.27, I.262

- fishing practices and III(2).33
 - forest and grassland conservation/forest protected areas and I.271-273
 - good governance and I.148
 - inclusion in legislation I.261
 - as legislative objective III(1).60
 - management plans and III(1).221(e), III(1).221(m)
 - MPAs and I.278-279, III(2).158, III(2).159, III(2).190
 - protected areas system plan and I.260
 - recreational activities III(1).292-294, III(1).302-304
 - regulations for use of protected areas and III(1).292-294, III(1).302-304
 - tourism (MPAs) and III(2).221
 - UNFF and I.271-273
 - WCED and I.259-260
 - WHC Operational Guidelines (2008) I.198
 - 'wise use' (Ramsar 3.1) I.204
 - WPC V (2003), endorsement by I.26
 - WSSD Plan of Implementation (2002) I.27
- system planning**
- ad hoc approach, problems arising from I.46
 - CBD obligation (Art. 8(a) and Programme of Work (2004)) I.47, I.269
 - climate change and I.45
 - definition I.42
 - ecosystem approach: see ecosystem approach
 - external threats to conservation and I.46
 - invasive alien species (IAS) and I.45
 - main characteristics (IUCN-WCPA guidelines) **Box I-1**
 - maximization of desirable characteristics as objective I.43
 - protected areas system plan: see protected areas system plan
 - scope and purpose I.43-44
 - voluntarily conserved areas and I.44
 - WPC Durban Action Plan (2003) I.47
- tenure in relation to land and resource use rights** II.96-101: see also legal status of land or sea considered for designation as protected area
- in Australia **Table II-4**, II.102
 - boundaries and zones, demarcation and III(1).168
 - co-occurrence of governance and ownership II.98
 - co-management/shared government and II.98, III(1).96
 - collective/common ownership II.99
 - complexities (ICCAs) II.33, II.98
 - constitutional provisions III(1).10
 - customary law II.96, II.99
 - definition II.96
 - government-owned land with right to independent management II.99
 - incorporated communities II.100
 - legislative provision II.96
 - PPAs II.98
 - state-owned protected areas II.98
 - uncertainties, difficulties caused by II.96
 - variety of tenure systems II.33, II.97

territorial sea (UNCLOS 2-32)

definition and status (UNCLOS 2) **III(2).56**

innocent passage, coastal states' right to make laws and regulations subject to limitations (UNCLOS 21) **III(2).56, III(2).73-74**

tourism: see recreational activities, regulation of

traditional peoples: see indigenous or traditional peoples

transboundary biosphere reserves (TBRs) Box II-2, IV.68-70: see *also* biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves

transboundary guidance IV.68-69

transboundary protected areas (TBPAs) Part IV

adaptive management and **I.137-138, I.227, IV.96**

administrative working-level documents **IV.72(c)**

ancillary agreements **IV.72(d), IV.83, IV.89**

biosphere reserves and **IV.18**

community involvement **IV.102-105**

compliance, enforcement and surveillance **IV.110-112**

connectivity conservation/ecological corridors **IV.18, IV.26, IV.61**

consistency with conservation objectives, need for **IV.74**

cooperation arrangements (informal) **IV.86-87**

coordination mechanisms and **III(1).105**

customary law **IV.71**

definition (IUCN, 2008) **IV.12**

development of concept and increase in numbers **IV.4, Box IV-1**

dispute resolution provisions **IV.114-116**

domestic enabling legislation **IV.72(a), IV.73-76**

EIAs **IV.106-108**

emergencies and disasters **IV.106-108, IV.106-109**

federal states and **IV.76**

formal agreements **IV.83, IV.89-90**

formal vs informal agreement **IV.87, IV.91**

global conventions relevant to **I.177-216, IV.33-51**

'Global Network to Support the Development of Transboundary Conservation Initiatives' (Durban Action Plan) **IV.16**

Global Transboundary Protected Areas Network **IV.15**

good governance and **IV.74**

informal arrangements **IV.91-96**

institutional options for cooperation **IV.97-98**

invasive alien species and **IV.101**

key objectives (including examples) **IV.74, IV.84-85**

levels of cooperation **Table IV-3**

local community involvement **IV.29-30, IV.102-105**

management, monitoring and evaluation **IV.100**

management principles, key considerations **IV.23-32, IV.102-104**

mobile peoples **Box II-2:** see *also* mobile peoples and protected areas

monitoring and evaluation **IV.100**

multilateral conventions and similar international instruments relevant to **IV.33-34**

NGO role and **IV.105**

non-conservation issues **IV.78**

participation in decision making **IV.102-105**

- planning new TBPA **IV.99**
- pre-drafting review and analysis **IV.77-83**
- protected area management categories (IUCN 2008), applicability **IV.25**
- regional conventions relevant to **I.217-242, IV.52-65**
- review of existing agreements and arrangements between parties **IV.77-83**
- scientific research and data sharing **IV.113**
- scientific research and dispute resolution **113**
- security issues **IV.103**
- Security issues in the planning and management of Transboundary Conservation Areas* (Brack et al, 2006) **IV.3**
- site-specific establishment and management agreements **IV.72(b)**
- situation-specific nature of agreements **IV.77**
- special legal considerations **IV.71-116**
- stand-alone vs omnibus legislation **IV.73, IV.75**
- Sulu-Sulawesi Marine Ecoregion MOU (2004) **IV.90, Box IV-4**
- TBPA conservation component of general agreement **IV.72(b)**
- TBPA-related coordination functions **IV.99-116**
- TBPA-specific bilateral or multilateral agreements **IV.71**
- transboundary community cooperation **IV.29, IV.102**
- transboundary harmonization of laws and actions including penalties **IV.32, IV.112, IV.117**
- Transboundary protected areas for peace and cooperation* (Sandwith et al, 2001) **IV.2**
- transformation of informal instrument into formal instrument **IV.94-95**
- typology/classification with examples **IV.10-11, IV.14, Box IV.-2**
- WHC obligations (WHC 6(3)) and **I.191**

- transparency as principle of good governance** **I.149, I.151, I.152**
 - Aarhus Convention (1998) **I.155**
 - accountability and **III(1).65, III(1).66, III(1).68, III(1).75**
 - benefits **I.165**
 - Earth Charter (2000) **I.268**
 - powers and responsibilities of protected areas authorities **Box III(1)-5**

- treaty obligations, implementation** **III(1).11-16**
 - conflict between national law and treaty obligations **III(1).15**
 - COPs decisions, relevance **III(1).11**
 - implementing legislation/compliance obligation **III(1).12-14, III(1).16, III(1).263**
 - legislative objectives and **III(1).53**
 - monist vs dualist approaches to **III(1).12-14**
 - as national policy source **III(1).43**
 - treaties in force or being considered for ratification, lists **III(1).11**
 - 'treaty' **III(1).11**

- UN Declaration on the Rights of Indigenous Peoples (2007) (UNDRIP):** see Indigenous Peoples, UN Declaration on the Rights of (2007) (UNDRIP)

- UN Forum on Forests (UNFF)** **I.271-273**
 - establishment (ECOSOC Res. 2000/35) **I.271**
 - legislative bodies/protected area authorities, as source of guidance for **I.273**
 - membership **I.271**
 - 'Non-legally binding agreement on all types of forests' (2007) **I.272**
 - objectives **I.271**
 - sustainable use/development and **I.271-273**

- UNCLOS:** see Law of the Sea Convention (1982) (UNCLOS)

Underwater Cultural Heritage Convention (2001)

- in situ conservation and **Box III(2)-7, III(2).102**
- object and purpose **Box III(2)-7, III(2).102**

UNDP, ecosystem approach and **I.60**

UNEP

- ecosystem approach and **I.60**
- good governance guidelines (2010) **I.157**

UNESCO Man and the Biosphere Programme: see biosphere reserves (UNESCO Man and the Biosphere Programme (MAB))/World Network of Biosphere Reserves

United Kingdom

- conservation agreements **III(1).247**
- easements/covenants running with the land **II.113**
- land trusts **II.120**
- OSPAR (1992) **III(2).3(2).118**
- treaty obligations, implementation **III(1).14**
- World Heritage transboundary sites **IV.44**

United States

- conservation agreements **II.247**
- easements/covenants running with the land **II.113-114**
- Freedom of Information Act **I.162**
- funds/fund raising **III(1).404**
- governance of protected areas **II.21, II.43**
- land trusts/conservation easements **II.121-125**
- MPAs **Box III(2)-10, III(2).82-83, III(2).138, III(2).215**
- tenure systems **II.99**
- treaty obligations, implementation **III(1).14**

Universal Declaration of Human Rights (U1948) (UDHR), good governance and (UDHR 21) **I.147**

Vilcanota Spiritual Park (Peru) Box II-1

voluntarily conserved areas/voluntary conservation efforts, special considerations **I.24-25, II.2, II.9-12, II.26-28, II.31, III(1).88, III(1).201-211, III(1).223:** see also co-management; conservation agreements; indigenous peoples and community conserved areas (ICCAs); private protected areas (PPAs)

- adaptive management and **III(1).244**
- African Convention (revised) XXII(2) and **I.223**
- agreement between parties setting out rights and duties, need for **I.38, III(1).86**
- authority to designate as formal protected area **III(1).149(b) and (c), III(1).205**
- compliance and enforcement: see compliance and enforcement, voluntarily conserved areas
- conservation agreements and **III(1).206-207**
- conservation efforts in general, importance **I.39, III(1).208:** see also buffer zones and connectivity conservation
- content of management plans for **III(1).223, III(1).239-244**
- coordination mechanisms **III(1).156**
- customary law basis for legal recognition **III(1).149(b)**
- default on commitments, consequences **II.95**
- definition/variety of form and terminology **I.24, II.25-26**
- Durban Action Plan (2004) and **II.9, II.89**
- ecosystem approach and **III(1).128**
- elements for inclusion in management plan for **III(1).223, III(1).239-244**
- establishment/designation as formal protected areas **I.24-25, II.2, II.9-12, II.31, III(1).201-211**
- executive or legislative action relating to protected area designation in general, applicability **III(1).149(c)**

flexibility in management plan, need for III(1).223(b), III(1).239
 free informed consent to establishment as formal protected area, need for III(1).223(d)
 identification and designation as formal protected area II.36, III(1).151
 incentives and equitable benefit sharing, need for III(1).112
 increasing importance II.4-12
 institutional arrangements for III(1).111-112
 IUCN governance types and II.16-17
 nomination process III(1).156, III(1).209-211
 object and purpose of management plan for III(1).239
 participation in decision making I.169-170, II.89-92, III(1).88, III(1).209
 perpetual integrity and I.36, I.38
 preparation of management plan for formal protected areas III(1).241-242
 protected area management categories (IUCN 2008), applicability II.86-88
 public participation, confidentiality considerations II.90, III(1).156, III(1).243
 regulated activities/regulations: see regulated activities/regulations (general), voluntarily conserved areas
 requirements for establishment/designation III(1).123(c), III(1).204
 respect for existing institutional arrangements III(1).202
 security of tenure/title, importance I.38
 site-specific nature of management plans III(1).223(c)
 system planning and I.44
 ‘voluntary’ rights over use and management of public land/resources I.37
 WCC and II.12
 WDPA and I.36
 WPC and II.9-12
 WPC Rec. V.26 (community conserved areas) II.40-41

W Transboundary Biosphere Reserve (Benin, Burkina Faso and Niger) Box II-2

Wadden Sea

agreements relating to I.216
 integration principle and III(2).217
 as PSSA III(2).82, III(2).217
 as World Heritage Site III(2).217, IV.45, **Box IV-3**

Western Africa

regional convention III(2).107
 Regional Seas Programme III(2).106

Western Hemisphere Convention (1940)

conclusion, entry into force and parties I.231, I.231 frame
 definition of protected area I.234-235
 guidance role I.231, I.233
 inviolability of strict wilderness areas (Art. IV) I.235
 judicial decisions based directly on I.231
 natural scenery, striking geological formations and places and objects of aesthetic, historic or scientific value (Art. V(2)) I.236
 objectives I.231, I.231 frame
 obligation not to alter or alienate protected areas except by legislative authority (Art. III) I.235
 obligation to establish protected areas (Art. II) I.234
 prohibition of hunting in certain protected areas (Art. III and Annex) I.235
 protected areas law, relevance for I.231-233

wetlands: see Ramsar Convention (1971); Ramsar Guidelines; Ramsar List of Wetlands of International Importance

Wider Caribbean Regional Seas Programme III(2).106

Specially Protected and Wildlife Protocol (1990) III(2).115-116

World Alliance of Mobile Indigenous Peoples Box II-2**World Charter for Nature (1982) I.257**

core principles I.257

World Commission on Environment and Development (WCED)

Experts Group on Environmental Law I.258

Legal Principles for Environmental Protection and Sustainable Development I.261

participation and mandate I.258

report ('Our Common Future') I.258-259

sustainable use/development and I.27-28, I.259-260

World Conservation Congress (WCC)

Earth Charter (WCC Res. 3.022) (2004) I.267

IUCN Protected Area Guidelines (2008) I.6

'no-net loss' principle (WCC Res. 4.087) (2008) III(1).162

private protected areas (PPAs) and II.48

UN Declaration on the Rights of Indigenous Peoples (2007) (WCC Res. 4.052) II.82

voluntarily conserved areas/voluntary conservation efforts II.12

World Conservation Monitoring Centre: see World Database of Protected Areas (WDPA)**World Database of Protected Areas (WDPA)**

boundaries and zones, demarcation and III(1).170

MPAs III(2).10

object and purpose **Box Intro-1**

private protected areas (PPAs) and II.48

'protected area' (IUCN 2008) and I.7

protected area management categories (IUCN), use of I.87, III(1).143, III(1).146

statistics **Box Intro-1**, I.187

voluntarily conserved areas and I.36

World Heritage Committee

advisory bodies I.200

composition I.187

role I.186-187, I.196

World Heritage Convention (1972) (WHC) I.186-200: see also Underwater Cultural Heritage Convention (2001)

conclusion, entry into force and parties I.186 frame

'cultural and natural heritage of outstanding universal value' (WHC 6(3)) I.191

implementation measures, obligation to report I.191

legal and other measures for sites I.191

objectives (WHC preamble) I.186, I.186 frame

Operating Guidelines: see World Heritage Operational Guidelines (WHCOG) (2008)

'outstanding universal value' (WHCOG) I.192, III(1).32

protected areas law, relevance for I.189-190

state responsibility I.191

submission of inventory of sites for inclusion in World Heritage List (WHC 11) I.191

TBPAs and IV.33

World Heritage in Danger List (WHC 11(4)) I.196-197**World Heritage Fund I.188****World Heritage List: see also World Heritage in Danger List (WHC 11(4))**

- boundaries and zones, demarcation and I.194, I.197
 - compliance with legal protections I.189, I.194
 - criteria for inclusion (WHCOG) I.186, I.193-195
 - marine sites and III(2).99-101
 - obligation to submit inventory of sites (WHC 11) I.191
 - removal from List I.189, I.195
 - TBPAs IV.42-45
 - Wadden Sea III(2).217, IV.45, Box IV-3
- World Heritage Marine Programme (2005)** III(2).100-102
- nomination of World Heritage sites and III(2).100
 - object and purpose III(2).101
- World Heritage Operational Guidelines (WHCOG) (2008)**
- criteria for inclusion on World Heritage List I.186, I.193-195
 - designation as protected area/IUCN categories distinguished I.199-200
 - governance approaches and II.76
 - legal protections I.194
 - management plans for World Heritage Site I.94, III(1).213
 - ‘outstanding universal value’ I.192
 - role of advisory bodies I.200
 - scope I.190
 - sustainable use/development I.198
 - TBPAs and IV.42
- World Heritage Tourism Programme** III(1).3(1).304
- World Parks Congress (WPC) 2003 (Vth)**
- ‘Benefits beyond Boundaries’ I.26, I.183
 - Durban Action Plan (2004) I.47, I.56, I.67: *see also* Durban Action Plan (2004)
 - ecosystem approach I.56
 - voluntarily conserved areas/voluntary conservation efforts and I.44, II.9-12
 - World Alliance of Mobile Indigenous Peoples Box II-2
 - WPC Rec. V.9 (biosphere reserves) I.244, III(1).192
 - WPC Rec. V.10 (biosphere reserves) III(1).192
 - WPC Rec. V.16 (good governance) I.144, I.150-151
 - WPC Rec. V.17 (governance) I.144, II.11
 - WPC Rec. V.26 (community conserved areas) II.40-41
 - WPC V.22 (MPAs) III(2).159
 - WPC V.25 (co-management of protected areas) II.57, II.59
- World Summit on Sustainable Development (2002) (WSSD)** I.269-270: *see also* CBD Programme of Work on Protected Areas (Dec. VII/28 (2004)); sustainable use/development; WSSD Plan of Implementation (2002)
- Earth Charter (2000) and I.267
- WSSD Plan of Implementation (2002):** *see also* CBD Programme of Work on Protected Areas (Dec. VII/28 (2004)); sustainable use/development
- ecosystem approach I.58
 - good governance and I.148
 - marine and coastal protected areas (CBD/COPs) (MPAs) I.270, III(2).158
 - sustainable development, definition I.27
 - targets I.183
- Xingu Indigenous Park (PIX) (Brazil)** Box II-1

zoning as management tool III(1).224-226: *see also* buffer zones and connectivity conservation
adaptive management and III(1).224
flexibility/gradation of regulation III(1).225-226
inclusion in plan III(1).221(h)
inclusion of possibility in legislation III(1).224, III(2).161(p)
MPAs and III(2).197-198, III(2).208-210
protected area management categories as basis vs site-specific management needs III(1).224
TBPAAs IV.57

About the author

Barbara J. Lausche is an international environmental lawyer and since 1968 an elected Member of the International Council of Environmental Law. She became involved with the IUCN Environmental Law Programme (ELP) in the late 1970s, writing the first version of the *IUCN Guidelines for Protected Areas Legislation* (1980) after serving in Africa (Peace Corps volunteer) as legal drafter in wildlife and protected areas conservation. Over the years she contributed to other IUCN law publications and projects in developing countries. A member of IUCN's Law Commission since 1980, she has maintained active ties with the ELP throughout her career in environmental law, which included managing the World Wildlife Fund-US Legal Technical Assistance Program in the 1980s and then serving at the World Bank as its first full-time environmental lawyer, and in the 1990s as Program Coordinator at the Global Environmental Facility Secretariat. She continues to advise developing countries and organizations on protected areas legislation, compliance with international conventions, and law and policy principles of biodiversity conservation. Focusing in recent years on the Caribbean and small island states (as Senior Associate to the Island Resources Foundation), she presently lives with her husband in Sarasota, Florida, where she serves as Director to the Marine Policy Institute, Mote Marine Laboratory.



IUCN Environmental Law Programme
Environmental Law Centre
Godesberger Allee 108-112
53175 Bonn, Germany
Phone: ++ 49 228 / 2692 231
Fax: ++ 49 228 / 2692 250
elcsecretariat@iucn.org
www.iucn.org/law