

World Commission on Protected Areas (WCPA)

Transboundary Protected Areas for Peace and Co-operation

Trevor Sandwith, Clare Shine,
Lawrence Hamilton and David Sheppard

Adrian Phillips, Series Editor



Best Practice Protected Area Guidelines Series No. 7

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Based on the proceedings of workshops
held in Bormio (1998) and Gland (2000)

Trevor Sandwith, Clare Shine, Lawrence Hamilton
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© 2001 Dorothy C. Zbicz, PhD. *Global List of Complexes of Internationally Adjoining Protected Areas* (Article and accompanying list as appearing in the final draft of 14 August, 2001). This material is included as Appendix 1 in this publication.

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Foreword

Protected areas are vital for life on earth. They safeguard biological and cultural diversity, help to improve the livelihoods of local communities, provide the homelands for many indigenous peoples and bring countless benefits to society in general. As the world becomes more crowded, and as the pressures on natural resources increase, so there is a growing recognition of the importance of such places to the future of humankind. But why should *particular* attention be given to transboundary protected areas – that is, to adjoining protected areas that involve a degree of co-operation across one or more boundaries between (or within) countries?

It is now generally understood that conservation planning cannot just be site- specific, but has to be at broader scales, both at national and regional levels. Plants and animals do not recognize national boundaries; nor do many of the forces that threaten them. Clearly, strategies to conserve biodiversity in the 21st century must emphasize transboundary co-operation in relation to shared ecosystems and other conservation concerns.

The rationale for this was graphically expressed by Dr Z. Pallo Jordan (then South African Minister of Environmental Affairs and Tourism) in his opening address to the 1997 Cape Town meeting on Transboundary Protected Areas:

“The rivers of Southern Africa are shared by more than one country. Our mountain ranges do not end abruptly because some 19th century politician drew a line on a map. The winds, the oceans, the rain and atmospheric currents do not recognize political frontiers. The earth’s environment is the common property of all humanity and creation, and what takes place in one country affects not only its neighbours, but many others well beyond its borders”

Many countries have responded to this challenge. As these guidelines report, the numbers of transboundary protected areas have grown rapidly in recent times. In 1988, there were only some 59 groups of adjoining protected areas, separated by national boundaries. By 2001 this had grown to 169, involving 666 individual protected areas. In many cases there were co-operative arrangements in place: true transboundary protected areas. While this is a welcome trend, there is a need to consolidate this experience.

Quite apart from the benefits for biodiversity conservation, transboundary protected areas can also play an important role in fostering better co-operation and understanding between countries. Indeed they may help catalyze the peaceful resolution of disputes. In many parts of the world, transboundary protected areas have been important in building bridges between nations and peoples. But, here too, until recently at least, this experience had not been analysed systematically, nor had the lessons been drawn from it.

In order to focus more attention on the conservation and security benefits of transboundary protected areas, IUCN’s World Commission on Protected Areas (WCPA) initiated a programme of work on this important topic a few years ago. This publication represents the culmination of this activity, and specifically of the work done for and at

meetings held in Cape Town, Bormio and Gland between 1997 and 2000. It is also the outcome of a major co-operative effort between WCPA and the IUCN Commission on Environmental Law (CEL), and between IUCN and many partners. IUCN is especially indebted to the Government of Italy, and the Italian Directorate General for Development Co-operation. They were key supporters of these meetings and have encouraged transboundary protected area initiatives around the world; without their support, these guidelines could not have been published.

David Sheppard
Head of the IUCN Programme on Protected Areas

Preface

IUCN is to be congratulated in taking the initiative and sustaining efforts to promote the role of transboundary protected areas (TBPAs) for biodiversity conservation, peace and co-operation. It is also most encouraging to see the recent surge of support that such linkages are receiving in many countries throughout the world, coming from local communities, governments, conservation and tourism organizations, bilateral and multi-lateral aid agencies, the private sector and NGOs.

The world economic system is now highly competitive and market-based, and many developing countries have been largely marginalized in recent years in attracting significant inflows of long-term foreign direct investment. International donor organizations increasingly stress that in order to produce sustained economic growth, developing countries must create and maintain an enabling environment for investment. TBPAs meet this requirement, open up new opportunities for private/public sector partnerships and help to restore investor confidence especially in Africa, a continent often perceived as lacking in transparency and accountability, and trapped in a syndrome of dependency.

It has been my own experience that transboundary co-operative action is a highly strategic means of achieving regional integration, and securing landscape-level conservation at a scale not possible previously. A giant step was taken on 12 May 2000 when President Festus Mogae of Botswana and President Thabo Mbeki of South Africa officially opened the Kgalagadi Transfrontier Park (KTP) as the world's first formally designated transfrontier park. The KTP brings together the 28,400km² Gemsbok National Park in Botswana with the 9,591km² Kalahari Gemsbok National Park in South Africa as a single unit under a unified system of control and management, with tourists being able to move freely across the international boundaries between the two countries. However, Botswana and South Africa retain their territorial integrity and separate legal systems in their respective areas. Such a high level of political commitment can only help the cause of TBPA establishment, both in Africa and elsewhere in the world. In fact, in the Southern African sub-region, there are now four negotiated agreements, and others in the pipeline which will enhance conservation of some of the world's most important biodiversity hotspots, and make a significant contribution to regional economic development.

I hope that conservation managers will benefit from these guidelines that bring together important perspectives and lessons from recent efforts to develop transboundary protected areas.

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Acknowledgements

This publication is the result of joint work between two IUCN commissions: the World Commission on Protected Areas (WCPA) and the Commission on Environmental Law (CEL). Material for these guidelines was generated at three meetings convened by WCPA in Somerset West, near Cape Town, South Africa (October 1997), Bormio, Italy (May 1998) and Gland, Switzerland (February 2000). These meetings built on an earlier workshop in 1995, co-sponsored by WCPA and Australian Alps National Parks, which analysed the experience of transboundary co-operation drawn from 33 protected area managers representing 18 countries.

This publication was compiled by Trevor Sandwith, Clare Shine, Lawrence Hamilton and David Sheppard, supported by Pedro Rosabal of the IUCN Programme on Protected Areas and Charles di Leva and Françoise Burhenne-Guilmin of the IUCN Environmental Law Centre. Contributors to the Bormio and Gland workshops included Faisal Abu-Izzeddin, Milena Bellini, Carlos Chacon, José Cisneros, Rob Davies, Juliet Fall, Alfredo Guillet, Sam Kanyamibwa, Annette Lanjouw, Kathy Mackinnon, Gonzalo Oviedo, Patrizia Rossi, Tom Rotherham, Alberto Salas, Johanna Sutherland, Richard Tarasofsky, Renier Thiadens, Alvaro Umana, Samson Werikhe, Arthur Westing and Nattley Williams. Further material and comments on the draft manuscript were provided by Salman Abu-Rukun, Gerardo Budowski, Juan Castro-Chamberlain, Javier Claparols, Eliezer Frankenberg, Linda Hamilton, John Hanks, Elizabeth Hughes, Judy Oglethorpe, Alison Ormsby, Peter Schachenmann and especially by Adrian Phillips and Hanna Jaireth. In addition to providing useful comments, Dorothy Zbicz generously contributed the global list of protected areas which abut across international boundaries at Appendix 1. The UNEP-WCMC provided the updated regional maps of these areas (Appendix 2).

Financial support for the meetings and follow-up work was generously provided by the Italian Government through the Italian Directorate General for Development Co-operation. A large number of organisations supported the meeting in South Africa in 1997, including: the Peace Parks Foundation (South Africa), UNESCO Man and the Biosphere Programme, USAID, United States National Park Service, United States State Department, World Bank (Environment Department), WWF, AVIS Car Rental, Nedbank Limited, SANLAM, South African Airways Corporation, Stellenbosch Farmers' Winery Limited, Syfrets Limited and The Lord Charles Hotel.

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Abbreviations and acronyms

CEL	IUCN Commission on Environmental Law
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Animals
GEF	Global Environment Facility
EIA	Environmental impact assessment
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Co-operation)
ICRC	International Committee of the Red Cross
IUCN	The World Conservation Union
MAB	UNESCO Man and the Biosphere Programme
MOU	Memorandum of Understanding
NGO	Non-governmental Organisation
PA	Protected Area
PPA	Programme on Protected Areas (of IUCN)
Ramsar	Convention on Wetlands of International Importance especially as Waterfowl Habitat
SADC	Southern African Development Community
TFCA	Transfrontier Conservation Area
TBPA	Transboundary Protected Area
TBR	Transboundary Biosphere Reserve
UN	United Nations
UNEP-WCMC	United Nations Environment Programme-World Conservation Monitoring Centre
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
WCPA	IUCN World Commission on Protected Areas
WWF	World Wide Fund for Nature (World Wildlife Fund in North America)

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Other publications in the series are as follows:

National System Planning for Protected Areas. No. 1. Adrian G. Davey, 1998, x + 71pp.

Economic Values of Protected Areas: Guidelines for Protected Area Managers. No. 2. Task Force on Economic Benefits of Protected Areas for the World Commission on Protected Areas (WCPA) IUCN in collaboration with the Economics Service Unit of IUCN, 1998, xii + 52pp.

Guidelines for Marine Protected Areas. No. 3. Graeme Kelleher, 1999, xxiv + 107pp.

Indigenous and Traditional Peoples and Protected Areas: Principles, Guidelines and Case Studies. No. 4. Beltrán, J. (Ed.) (2000). IUCN, Gland, Switzerland and Cambridge, UK and WWF International, Gland, Switzerland. xi + 133pp.

Pueblos Indígenas y Tradicionales y Áreas Protegidas: Principios, Directrices y Casos de Estudio. No. 4. Beltrán, J. (Ed.) (2001). UICN, Gland, Suiza y Cambridge, UK y WWF Internacional, Gland, Suiza. xii + 139pp.

Financing Protected Areas: Guidelines for Protected Area Managers. No. 5. Financing Protected Areas Task Force of the World Commission on Protected Areas (WCPA) of IUCN, in collaboration with the Economics Unit of IUCN, 2000. viii + 58pp.

Evaluating Effectiveness: A Framework for Assessing the Management of Protected Areas. No. 6. Marc Hockings, Sue Stolton and Nigel Dudley, 2000, x + 121pp.

1. Introduction and definitions

1.1 Background

There are many instances worldwide of long-standing interaction and co-operation between two or more adjoining protected areas that are divided by international or sub-national boundaries. It has long been recognised that such areas have symbolic value for peaceful co-operation between nations as well as practical benefit for co-ordinated or joint conservation management. As early as 1932, the Waterton-Glacier International Peace Park was designated to commemorate the long history of peace and friendship between Canada and the United States, and to emphasize both natural and cultural links. More recently, several initiatives have explored the potential for developing such linkages: not only through transboundary protected areas (TBPAs), some of which may be managed as a single unit by the countries or jurisdictions involved, but also situations where transboundary natural resource management does not involve protected areas (Griffin, 1999). This publication considers the specific situation where there is – or could be – transboundary co-operation involving protected areas, and where both conservation and peaceful co-operation are important objectives. It also covers the processes that lead to the development of TBPAs and the concept of Parks for Peace.

Since 1997, IUCN has promoted a Parks for Peace initiative as a tool to enhance regional co-operation for biodiversity conservation, conflict prevention, resolution and reconciliation, and sustainable regional development. This work has been undertaken in a partnership between IUCN's World Commission on Protected Areas (WCPA), Programme on Protected Areas (PPA), its Commission on Environmental Law (CEL), and the Peace Parks Foundation (South Africa)¹. Concepts and guiding principles have been developed through a number of events convened by WCPA, including:

- the International Conference on Transboundary Protected Areas as a Vehicle for International Co-operation (Cape Town, South Africa, 1997);
- the International Symposium on Parks for Peace (Bormio, Italy, 1998); and
- a follow-up Parks for Peace meeting: Promoting a Global Partnership (Gland, Switzerland, 2000).

The Parks for Peace initiative also builds on other work by IUCN/WCPA on trans-frontier parks and transborder protected area co-operation. An early initiative was the Borders Parks Workshop, held in Banff, Canada in 1988 (Thorsell, 1990). Several activities in Europe were fostered by the IUCN/WCPA programme “Parks for Life: Action for Protected Areas in Europe” where transfrontier co-operation has been one of the priority items (IUCN, 1994; Cerovský, 1996; Brunner, 1999). A major international

¹ The Peace Parks Foundation's mission is to facilitate the establishment of Transfrontier Conservation Areas in the Southern African Development Community (SADC), supporting sustainable economic development, the conservation of biodiversity, and regional peace and stability. It is a partner in the proposed Global Partnership for Peace Parks (See Section 1.1 (iv)).

workshop held in Australia in 1995 focused on transboundary protected area co-operation in mountain areas and provided further impetus for the present initiative (Hamilton *et al.*, 1996).

A number of bodies have worked to establish a set of guiding principles and practices relating to the Parks for Peace concept. These include WWF, which is playing an important role in promoting and implementing field projects on planning and managing TBPAs, and the United Nations University for Peace which has promoted the concept of a global partnership to promote the objectives of Parks for Peace.

Participants in this process agree on the need to consolidate advice, and in particular to produce:

- (i) A working definition of Parks for Peace. This will assist in the recognition and/or designation of areas which meet agreed criteria;
- (ii) Guidelines for transboundary co-operation in protected areas. This will assist conservation managers and agencies in the development and management of TBPAs for nature conservation purposes, emphasize the value of these areas in promoting peace, co-operation and human development, and build awareness of principles and best practices that underpin transboundary co-operation;
- (iii) A Draft Code for Transboundary Protected Areas in Times of Peace and Armed Conflict. This will provide a clear framework for all concerned with the establishment and management of such areas, and in particular with regard to the prevention or mitigation of armed conflict in and around TBPAs;
- (iv) A project proposal for a Global Partnership regarding Parks for Peace.

Items (i) to (iii) above are presented in this volume (Chapters 1, 3 and 4 respectively), together with useful material and legal precedents set out in the Appendices. The participants have developed a project proposal (iv) which is currently under consideration. Although the Guidelines and Draft Code have slightly different audiences, they are published together because of the need to place best practice in the field within a broader legal and diplomatic context. Indeed, TBPAs should always be developed in full recognition of the opportunities for conservation and co-operation, at local, national and international levels.

A Transboundary Protected Areas Task Force has been established by IUCN/WCPA to contribute to WCPA's strategic goals. Comments on this publication and suggestions and contributions to the Task Force's programme of activities can be addressed to the Task Force Chair, c/o IUCN Protected Areas Programme, Rue de Mauverney 28, CH-1196 Gland, Switzerland or by visiting the IUCN/WCPA website at www.wcpa.iucn.org.

1.2 Definitions

There has been much confusion over terms used in this field. Box 1 sets out a hierarchical, or nested, set of definitions adopted by IUCN in this publication. The starting point is the agreed definition of protected area; TBPAs are special types of protected areas; and Parks for Peace a special type of TBPA.

Points to note about these definitions include the following:

- In most cases, “transboundary” implies the context of international co-operation. However, it may also cover co-operation between neighbouring sub-national jurisdictions, including autonomous regions or provinces. This kind of approach may be particularly useful in situations where formerly divided states have been re-united, or vice versa; and where unilateral action by such jurisdictions would impede conservation and co-operation objectives.
- The word “co-operatively” has been added to the second part of the definition of a TBPA, although it does not appear in the definition of a protected area as such. This is because co-operation between the two or more individual protected areas is a prerequisite for recognition as a TBPA. It follows that there will be cases of protected areas which physically abut on either side of a boundary but which are not recognised as TBPAs, as understood in these guidelines, because there is no co-operation at all between the individual protected areas concerned. As a rule of thumb, the level of co-operation should reach at least Level 1 (as set out in Box 3.9) in order to be recognised as a TBPA.
- The United Nations University for Peace has used the term “Peace Park” for “protected areas where there is a significant conflictive past” (Gerardo Budowski, *pers. comm.*²), whether or not these occur in a transboundary

Box 1.1 Definitions

Protected Area

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity³, and of natural and associated cultural resources, and managed through legal or other effective means (IUCN, 1994a).

Transboundary Protected Area (TBPA)

An area of land and/or sea that straddles one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed co-operatively through legal or other effective means.

Parks for Peace

Parks for Peace are transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and co-operation.

² Gerardo Budowski, Vice Rector, United Nations University for Peace, Costa Rica, www.upeace.org

³ Biological diversity or “biodiversity” in the most general sense refers to “the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (Convention on Biological Diversity, Article 2). Thus, it encompasses the landscapes, ecosystems, species and genes, together with the ecosystem processes which sustain them, and is the basis of life on earth and sustainable human development. The term should therefore be interpreted, wherever appropriate, to include conservation and management of ecosystem functions and services.

Box 1.2 IUCN Protected Area Management Categories (IUCN, 1994a)

- I. Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection
- II. National Park: protected area managed mainly for ecosystem protection and recreation
- III. Natural Monument: protected area managed mainly for conservation of specific natural features
- IV. Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V. Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI. Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

situation. However, these guidelines reserve the term “Parks for Peace” for the particular sub-set of protected areas where there is a clear biodiversity objective, a clear peace objective *and* co-operation between at least two countries or sub-national jurisdictions.

- Since both TBPAs and Parks for Peace are subsets of protected areas, they should always conform not only to the IUCN definition of a protected area (Box 1.1) but also to one or more of the IUCN protected area management categories (see Box 1.2).
- The concept of Parks for Peace raises some novel questions for protected area managers, which are explored further in sections 1.3 and 1.4.

1.3 Objectives for Parks for Peace

The identification/designation of Parks for Peace by the cooperating jurisdictions should include only those areas where the agreed management objectives explicitly recognise both a protected area purpose and a peace purpose.

Parks for Peace should be founded on the recognition that human security, good governance, equitable development and respect for human rights are interdependent and indivisible. Peace is best developed by addressing the root causes of conflict and by promoting sustainable development, the rule of law and adherence to human rights, whether civil, political, economic, social or cultural.

Specific objectives of Parks for Peace may include the following aspects:

- (i) Supporting long-term co-operative conservation of biodiversity, ecosystem services, and natural and cultural values across boundaries;
- (ii) Promoting landscape-level ecosystem management through integrated bio-regional land-use planning and management;

- (iii) Building trust, understanding, reconciliation and co-operation between and among countries, communities, agencies and other stakeholders;
- (iv) Preventing and/or resolving tension, including over access to natural resources;
- (v) Promoting the resolution of armed conflict and/or reconciliation following armed conflict;
- (vi) Sharing biodiversity and cultural resource management skills and experience, including co-operative research and information management;
- (vii) Promoting more efficient and effective co-operative management programmes;
- (viii) Promoting access to, and equitable and sustainable use of natural resources, consistent with national sovereignty; and
- (ix) Enhancing the benefits of conservation and promoting benefit-sharing across boundaries among stakeholders.

1.4 Designation criteria for Parks for Peace

There is no internationally-agreed procedure for designating Parks for Peace that equates to the listing of, for example, World Heritage sites, Ramsar sites or biosphere reserves. At a national level, widely varying approaches have been taken to the labelling of sites as “peace parks”, where they commemorate a history of conflict, or promote peace. Also a number of TBPAs have been named as “International Peace Parks”.

IUCN believes that it may be helpful to develop an international certification process to guide designation, consistent with the definitions and objectives proposed above. The development of such a certification process may be pursued by interested agencies in future, including IUCN/WCPA, IUCN/CEL, the United Nations University for Peace and the Peace Parks Foundation. Therefore, the following criteria for designating Parks for Peace are offered as interim guidance on this issue:

- (i) There should be at least two protected areas, as defined by IUCN, sharing a common national or sub-national boundary;
- (ii) In addition to biodiversity and any cultural objectives, there should be an explicit purpose to promote peace and co-operation, or to encourage peace and reconciliation during and after armed conflict;
- (iii) A formal bilateral or multilateral co-operation agreement should be entered into by the competent authorities for the countries or jurisdictions concerned;
- (iv) A co-operative management arrangement should be established by the agencies responsible for the protected areas;
- (v) Co-operative management and development programmes should be designed and implemented by these parties, involving all interested stakeholders;
- (vi) The Guidelines for Transboundary Co-operation in Protected Areas (Chapter 3) should be carefully considered by the parties;
- (vii) Parties should be guided by, and adhere to, the elements of the Draft Code for Transboundary Protected Areas in Times of Peace and Armed Conflict (Chapter 4).

2. Transboundary co-operation between protected areas

2.1 Number of complexes of internationally adjoining protected areas

There are currently at least 169 complexes of two or more adjoining protected areas which are divided by international boundaries (Zbicz, 2001). They involve a total of 666 protected areas representing 113 countries. There are varying levels of co-operation and formalisation of co-operative management agreements within these complexes. Many are already TBPA's, whilst others, where the necessary co-operation is currently absent, have the potential to become TBPA's. A list of these complexes, compiled by Zbicz (2001), is contained at Appendix 1. Regional maps updated by UNEP-WCMC are contained at Appendix 2.

2.2 Benefits

The establishment of TBPA's by two or more countries or other jurisdictions, creates opportunities for enhanced transboundary co-operation in their management. It also helps to encourage friendship and reduce tension in border regions. The principal benefits, as identified through the IUCN "Parks for Peace" initiative, are:

- Promoting international co-operation at different levels and in different fora;
- Enhancing environmental protection across ecosystems;
- Facilitating more effective research;
- Bringing economic benefits to local and national economies; and
- Ensuring better cross-border control of problems such as fire, pests, poaching, marine pollution and smuggling.

Box 2.1 lists other examples of benefits (Hamilton *et al.*, 1996).

2.3 How transboundary initiatives develop

A shared vision of transboundary co-operation by all is the ultimate goal. This may come about in several ways as illustrated in the following sections.

2.3.1 High-level initiatives

The concept may be adopted at a high political level (agency head, minister, or even Head of State). The proposal can be conveyed to his or her counterpart across the

**Box 2.1 Benefits of transboundary protected area co-operation
(based on Hamilton et al., 1996)**

1. A larger contiguous area will better safeguard biodiversity since very large areas are needed to maintain minimum viable populations of many fauna species, particularly large carnivores.
2. Where populations of flora or fauna cross a political or administrative boundary, transboundary co-operation promotes ecosystem or bioregional management.
3. Reintroduction or natural re-colonisation of large-range species is facilitated by transboundary co-operation.
4. Pest species (pathogens, insects) or alien invasives that adversely affect native biodiversity are more easily controlled, if joint control is exercised rather than having a source of infection across the boundary.
5. For rare plant species needing *ex situ* bank and nursery facilities, one facility for both parks will be cheaper to set up than separate ones.
6. Joint research programmes can eliminate duplication, enlarge perspectives and skills pool, standardise methodologies, and share expensive equipment.
7. Wildfires cross boundaries, and better surveillance and management is possible through joint management.
8. Poaching and illegal trade across boundaries are better controlled by transboundary co-operation. Co-operation is needed for effective law enforcement. Joint patrols in border areas become possible.
9. Nature-based tourism is enhanced, because of a greater attraction for visitors, the possibilities of joint approaches to marketing and tour operator training, and the possibility of agreements on fees, visitor management etc.
10. More cost-effective and compelling education materials can be produced, and joint interpretation is stronger concerning shared natural or cultural resources.
11. Joint training of park staff is more cost effective and usually benefits from greater diversity of staff with different experiences.
12. Transboundary co-operation improves staff morale and reduces feeling of isolation. Contact with cultural differences enriches both partners.
13. Transboundary co-operation makes staff exchanges easier: staff exchange programs have shown their worth.
14. A cross-boundary pool of different expertise is available for problem solving.
15. Expenses for infrequently used heavy equipment, aircraft rental for patrols, etc. may be shared.
16. Transboundary co-operation in priority actions can carry more weight with authorities in each country.
17. The ministry level may feel greater obligation to honour commitments of support when another jurisdiction or another country is involved.
18. International designation, donors and assistance agencies are more attracted to an international joint proposal.
19. Outside threats may be more easily met (air pollution, inappropriate development) when there is an international or inter-state response.
20. Customs and immigration officials are more easily encouraged to co-operate if parks are cooperating.
21. Search and rescue is often more efficient and economical.

political boundary and could result in a formal agreement, signed at high level in each country or jurisdiction. Such an agreement could encompass a few key measures, such as a unifying theme, mutual assistance in emergencies, an oversight body, and a suggested institutional framework that could evolve over time.

A State to State example is the general Memorandum of Understanding between the United States and Canada regarding co-operation in management, research, protection, conservation and presentation of national parks and national historic sites. This empowers several transboundary initiatives in defined focal areas (see also the text of MoU in Appendix 3).

A similar arrangement is developing in the Maloti-Drakensberg area between South Africa and Lesotho. Here, high-level inter-governmental liaison on regional economic development encouraged co-operation in several sectors, including that of nature conservation. A general protocol for transfrontier conservation areas has been agreed within the Southern African Development Community (SADC), and there are specific bilateral and trilateral protocols between South Africa and Botswana, and between South Africa, Mozambique and Swaziland respectively.

A regional framework for co-operation was developed between Mexico and the US along their Rio Grande border. A framework for co-operation was agreed whereby Big Bend National Park (IUCN Category II) and Organ Pipe Cactus National Monument (Category III) on the US side stood ready to work with any adjoining protected areas in Mexico. With the formal establishment in Mexico of the Sierra de Maderas del Carmen and Cañón Santa Elena (both Category VI) in 1994, on-the-ground co-operation became possible, and is now becoming a reality.

In Asia, international and simultaneous establishment is well represented on the island of Borneo, involving Lanjak Entimau Reserve in Sarawak (Malaysia) (Category IV) and Gunung Bentuang dan Karimum in Kalimantan (Indonesia) (Category II).

Certain regions have initiated high-level co-operation as part of a reconciliation process following sustained political and social tension, or even armed conflict. Central America provides several well-established examples of transboundary co-operation of this kind (see Box 2.2). More recently, in South America, Peru and Ecuador agreed on the establishment of adjoining protected areas in the disputed Cordillera del Condor in 1998. This came about through negotiations leading to the peace accords, and were suggested by IUCN President Yolanda Kakabadse who was at that time also Ecuador's Minister for Environment.

In a more limited way, transboundary co-operation has been discussed or initiated between some countries in the Middle East, within the context of peace negotiations. Box 2.3 describes a situation where, following conflict, a peace treaty between Israel and Jordan paved the way for the establishment of a Peace Park. Similar solutions have been proposed for the Golan Heights.

Elsewhere, interest has been shown in the establishment of a peace park along the demilitarised zones (DMZ) between the Koreas, and to help resolve disputed claims between several countries to the South China Seas atoll of the Spratley Islands. A very special case is that of the Antarctic, where rival territorial claims have been shelved under the terms of the Antarctic Treaty. The treaty system prohibits mining on the continent, places environmental controls over all activities and fosters co-operative scientific programmes.

International organisations may actively encourage national governments or treaty focal points to develop TBPA complexes. This approach has been taken by the World Heritage Committee, the UNESCO Man and the Biosphere (MAB) Programme and the Ramsar Convention Bureau.

Biosphere reserves, which are themselves a framework for co-operative management, development, research, monitoring and education, are sometimes divided by an international border. The MAB Programme now formally supports the development of a single functional biosphere reserve or Transboundary Biosphere Reserve (see Appendix 4 on guidelines for Transboundary Biosphere Reserve development). The Carpathian Biosphere Reserve involves three countries (Poland, Slovakia and Ukraine).

Similarly, a transboundary area can be nominated and listed as a Transboundary World Heritage site if it meets the criteria for listing under the World Heritage Convention. There is a Transboundary World Heritage site involving the Mount Nimba Strict Nature Reserve in Guinea and Côte d'Ivoire (and efforts are being made to extend it to include Liberia).

There are several examples of contiguous Ramsar sites that form part of TBPA complexes, such as the Sundarbans mangrove swamps (India/Bangladesh) and the Parc National du "W" (Benin, Burkina Faso, and Niger), the Niger component of the latter site is also a World Heritage site and biosphere reserve.

Box 2.2 Two examples of TBPA's from Central America

La Amistad International Park, Central America, Costa Rica-Panama

La Amistad is one of the oldest transboundary biodiversity conservation projects in the Central American isthmus. Binational co-operation between Costa Rica and Panama dates from 1970 when the Planning and Economic Co-operation Ministries of both countries decided to promote the integrated development of their boundary zones. In 1979, the Presidents signed a joint declaration to establish La Amistad International Park. This declaration was effected in 1982 with the establishment of the TBPA. The Presidents of both countries ratified the agreement in 1992. The legal framework established a Binational Technical Commission responsible for follow up, control and evaluation of the agreement. The International La Amistad Park is nested within a Transboundary Biosphere Reserve.

The Sí-a-Paz project, Central America, Costa Rica – Nicaragua

In February 1988, at the XVII General Assembly of the IUCN in Costa Rica, the Ministers of Natural Resources of Costa Rica and Nicaragua signed a letter of understanding to facilitate the establishment of the "International System of Protected Areas for Peace" (Sí-a-Paz). In 1989, the Governments of both countries requested the technical support of the Regional Office of Meso-America of IUCN to design the binational protected area system with the financial support of Netherlands, Norway and Sweden. In August 1990, the Ministers of Natural Resources established a National Commission and a Binational Commission to review the design of the International Protected Areas System. This process ended in 1991 with a donors' meeting to support the Sí-a-Paz project. Binational protected areas like Los Guatuzos National Wildlife Refuge (Nicaragua) and Caño Negro Wildlife Refuge (Costa Rica) now coordinate their actions to maintain a similar approach to wetlands resource management in both countries.

2.3.2 Locally-based initiatives

Alternatively, the idea of transboundary co-operation may begin with two individual field staff members who experience real benefit through co-operation in one or more specific tasks on the ground, such as fire suppression. This may encourage them to collaborate in other tasks, so as to capture some of the practical benefits listed in Box 2.1. Their commitment and enthusiasm may spread to others, and eventually to most of the staff in the park, including the respective superintendents or directors. In this way, a good working relationship on projects can develop without much in the way of a formal agreement.

This approach is being suggested currently for the complex of protected and non-protected areas on the border shared by Cambodia, Laos and Vietnam. But although individuals can lead the way in promoting transboundary co-operation, it is better if there is also policy support at a higher level, for example as expressed in an agreement or memorandum of understanding. A well-established example of this approach is between the Alpi Marittime Nature Park (Italy) (Category V) and Mercantour National Park (France) (Category II); here a high degree of co-operation has been achieved by the two protected area directors, supported by an interagency agreement.

2.3.3 Third-party initiatives

Another route to transboundary co-operation is *via* a conservation non-governmental organisation (NGO) acting as a third party advocate, encouraging and supporting co-operative transboundary management. It may be the result of separate NGOs operating within each political jurisdiction, or of one NGO operating on both sides of the boundary.

Box 2.3 Creating TBPA's within a broader peace process (Israel and Jordan)

A Peace Treaty between Israel and Jordan was signed on 26 October 1994 in Aqaba. Its Environmental Appendix refers to protection of water sources, nature reserves and protected areas, pest control, tourism and historic heritage, and control of agricultural pollution. The Appendix emphasizes the importance of conserving biological diversity in the border area. The establishment of cross-border protected areas would promote *in situ* biodiversity conservation and enhance the peace process through co-operative management of transboundary resources.

Recently, the Nature Reserves Authority (NRA) and the Aqaba Regional Authority (ARA) of Jordan received a three-year grant from the USAID Middle East Regional Co-operation Fund for the conservation of the Gulf of Aqaba. The project, "Research, Monitoring and Management Program for the Binational Red Sea Marine Peace Park" will promote the management of the four kilometre long coral reef of Israel and the seven kilometre long coral reef of Jordan as the northernmost reefs of the world. The project will be based in the sea, on the coral reefs and along the coastlines of both countries. It will be conducted with the support of scientists of the Marine Science Station of Jordan and the Interuniversity Institute of Israel under the joint conservation administration of the NRA and ARA. Coordination of the project will be undertaken by scientists from the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce.

The Waterton-Glacier International Peace Park, in the Rocky Mountains of Canada and USA, was established in 1932 at the initiative of an NGO, Rotary International. In Central Africa, field co-operation among the three respective nature conservation agencies of the Democratic Republic of Congo, Rwanda and Uganda in the Mgahinga Gorilla/Virunga/Volcanoes National Park, has been encouraged and supported by three NGOs (African Wildlife Foundation, Fauna and Flora International, and WWF). The private Peace Parks Foundation in South Africa is currently supporting several transboundary conservation areas among the SADC states.

Encouragement may come from donors who, through their grants, loans and technical assistance, support transboundary co-operation and thus give impetus to national governments to enter into agreements involving transboundary co-operation in protected areas. For example, in the case of the MesoAmerican Biological Corridor, GEF, GTZ and the European Union are supporting transboundary co-operation among 37 protected areas in eight countries. Though the main motive for donors to act in this way has so far been better conservation, it could also be a means to promote regional co-operation during times of tension. Donor support for this purpose is being provided for the cloud forests in Africa's Albertine Rift by IUCN Netherlands. Some donors have looked at how they might support a whole programme of transboundary conservation areas in a region; for example, USAID has been examining how it could assist transboundary conservation programmes in the SADC region (Griffin, 1999).

2.4 Types of boundaries

2.4.1 Boundaries between and within States

What is meant by "boundaries"? Obviously, these include the political borders between States, but boundaries *within* countries (between states, provinces, indigenous peoples' territories, autonomous areas or other jurisdictions) are also important, particularly in countries with a federal constitution or other decentralised structure. Co-operation between States involves the difficulties of dealing with different institutional and legal frameworks, in some cases cultural and political differences, and in a few cases hostile or tense relations. Within countries, the legal and institutional frameworks in sub-national jurisdictions are likely to be broadly similar, making for easier co-operation, e.g. the three-state Hohe Tauern National Park within Austria.

Political boundaries have changed significantly in recent decades, with a rise in the number of nation-States, especially in former eastern bloc countries. Experience from many parts of the world indicates how transboundary co-operation can deliver benefits, even under hostile conditions. Many protected areas in Europe that were divided during the Cold War have been re-united since the fall of the Iron Curtain, and the co-operation which took place before, during and since this period has ensured better ecosystem management. In South Africa, communities and protected areas that were divided under the previous government, are now a source of reconciliation and opportunity.

2.4.2 Marine boundaries

Many, but not all adjacent States, have clearly delineated and mutually agreed marine boundaries; beyond their territorial waters, many coastal States have established Exclusive Economic Zones (EEZs). While boundaries in terrestrial ecosystems are

relatively easy to define, this is less so in the case of the marine environment. Marine ecosystems are totally interconnected and their functioning depends on complex ecological processes regulated by coastal and ocean currents, hydrological regimes, and inputs from land-based activities. Vertical differences are as important as horizontal ones. There is a need to understand these highly dynamic ecosystems in order to achieve effective co-operation in setting up and running Marine Protected Areas (Kelleher, 1999).

In the national context, the Great Barrier Reef Marine Park in Australia has achieved a remarkable degree of co-operation between the State of Queensland and the Commonwealth, and between administering agencies. Site-specific legislation provides for a special management authority and zoning system.

In a bilateral context, the Torres Strait Treaty (1978) between Australia and Papua New Guinea, and the domestic legislation and policies that implement this treaty, are innovative instruments for transboundary marine protected area management, despite the time taken to implement the agreement, and tensions related to native title issues. The Treaty sets out specific measures to protect the marine environment and promote bilateral co-operation in the conservation, management and sharing of fisheries resources.

A well-established example of trilateral co-operation concerns the Wadden Sea, shared between Denmark, Germany and the Netherlands (8,000km²). The legal basis for co-operation has been progressively formalised, moving from a joint governmental declaration in 1982 to a formal agreement in 1987 to manage the Wadden Sea as an ecological unit. The Common Wadden Sea Secretariat, based in Germany, guides and coordinates trilateral strategy and action for the area's conservation and management. It is already an important Ramsar site and is expected soon to be proposed as a World Heritage site.

There is a proposal for a TBPA between Mozambique and KwaZulu-Natal in South Africa, which could result in a transfrontier World Heritage site centred on the turtle nesting beaches and southern-most coral reefs in the world. High level co-operation has also been achieved between the Philippines and Indonesia at the Turtle Islands Marine Sanctuary.

2.4.3 Other kinds of “boundaries”

There are a number of other “boundaries” where co-operation is needed for conservation purposes. For example, there may be a need to foster regional co-operation in areas where States are not directly adjacent, such as the Caribbean or the Pacific Islands. Rivers and wetland ecosystems should also be managed in an integrated way, irrespective of political or administrative boundaries, because of their hydrological linkages. Coordination is needed along migratory flyways, water routes and mountain ranges so as to promote rational conservation and management of shared species populations.

Other “boundaries” may be institutional. As more and more protected areas are developed outside the direct control of national governments, by local tiers of government, NGOs, local communities or privately, co-operation may need to be developed between areas managed by different institutions with different ways of working and often employing different approaches to conservation. Some of this will be “vertical” (e.g. between central and local government) and some “horizontal” (e.g. between NGOs

and government). Such challenging issues, are, however, outside the scope of these guidelines.

It is sometimes suggested that transboundary co-operation depends on matching capacity on either side of a boundary. It is possible, however, to leverage support from a stronger partner to assist a weaker one, and so create greater parity. Nonetheless, different technical capacities can constitute a “boundary”. Thus while one protected area may have a well-developed structure with adequate staff, equipment and financial support, the adjacent one may have only one or two rangers caring for a vast territory, or suffer from a very weak management structure, few staff and no money. Some of the obstacles that need recognition are listed in Box 2.4 (Hamilton *et al.*, 1996).

Finally, agencies on different sides of the border may have different technical approaches to a common problem. For example, there has been incompatibility between the non-interventionist approach to bark beetle control in Germany’s Bayerischewald National Park (Category II), as against that adopted in the Šumava National Park (Category II) in the Czech Republic. There may be opportunities to learn from these different approaches and experiences, rather than to focus on what divides them.

Box 2.4 Difficulties impeding transboundary protected area co-operation (based on Hamilton *et al.*, 1996)

1. Difficult terrain, inaccessibility, lack of roads or rail across national frontiers impede interchange.
2. Different (sometimes conflicting) laws may reduce the effectiveness of transboundary co-operation.
3. The need for co-operation may slow the response to emergency situations calling for rapid decision.
4. Religious or cultural differences can cause misunderstanding.
5. Language barriers may have to be overcome.
6. Differential commitment and resources on each side of border can lead to a dominant/weak situation.
7. The different levels of professional standards for corresponding staff may impede real equal partner twinning.
8. Differences in the authority given to the two park superintendents or directors may produce difficulties in transboundary co-operation.
9. A lack of parity with regard to the ratification of international protocols or conventions may prevent their being used for transboundary co-operation.
10. Two or more countries may be at different stages of economic development and have incompatible policies related to resource utilisation, versus resource protection.
11. Armed conflict, hostility or political tension can make transboundary co-operation difficult, even impossible.
12. Technical incompatibilities in communication, fire suppression equipment, GIS systems, etc. may impede transboundary co-operation.

2.5 Different scenarios

In promoting and enhancing co-operation for conservation and sustainable use of biodiversity and for confidence-building, several different boundary scenarios need to be considered:

2.5.1 Adjacent protected areas

In many cases, there are existing, formally established protected areas that adjoin each other on a border between States or other political jurisdictions (Zbicz and Green, 1997; Zbicz, 2001). This is probably the most feasible case to start exploring options of co-operation across boundaries. While protected areas in two adjoining States are most common, there are instances of protected areas in three countries which adjoin each other in this way e.g. Mount Kanchenjunga (Nepal, China and Indian Sikkim).

2.5.2 Non-adjacent protected areas

In some cases, there are protected areas close to the border but not adjacent, touching it or each other, e.g. the Russian - Finnish Friendship Reserve. This results in an area between them, under land-use not necessarily linked to conservation aims. In this case, co-operation should be explored through the active involvement of local communities in the surrounding or buffer areas. Such co-operation should aim to expand the existing protected areas so as to include these intervening areas, and/or to promote biodiversity-friendly land-use or corridors that join along the borders of the countries involved and thus link the protected areas. Protected area managers in the countries involved need to agree and plan a joint effort to achieve local community involvement and support.

2.5.3 An existing protected area in one country and an informal “de facto” protected area in the other country

There may be a legally established protected area in one country, whilst in the other, natural or semi-natural areas are managed along conservation and sustainable use lines by local communities or indigenous peoples. An example is the Sungai Kayan Nature Reserve (Category VI)/Proposed Pulong Tau National Park (Indonesia and Malaysia).

Promotion of transboundary co-operation in such cases requires the identification of common values, benefits and interests with relevant local communities and indigenous groups in order to start co-operating on transboundary natural resources management. Such considerations are becoming increasingly important in many parts of the world where there are natural areas that are managed and protected by local communities and indigenous groups to ensure the survival of their local, mostly subsistence economies as well as their cultural traditions. In the Pacific Islands, for instance, where most land is communally owned, co-operation could be encouraged between different communities within one island to ensure protection and sustainable use of resources at the ecosystem level, irrespective of the existence of any community boundaries. In its published guidance on indigenous and traditional peoples and protected areas (Beltrán, 2000), IUCN sets out principles and guidelines, which are agreed with WWF. The last of these addresses transboundary situations (see Box 2.5).

Box 2.5 Extract from IUCN/WWF Principles and Guidelines on Indigenous/Traditional Peoples and Protected Areas

Principle 5:

The rights of indigenous and other traditional peoples in connection with protected areas are often an international responsibility, since many of the lands, territories, waters, coastal seas and other resources which they own or otherwise occupy or use cross-national boundaries, as indeed do many of the ecosystems in need of protection.

- 5.1 Where indigenous and other traditional peoples' lands, territories, waters, coastal seas, and other resources are located within trans-frontier protected areas, governments should adopt instruments to guarantee that protected area management respects and supports the integrity of the respective indigenous and local communities;
- 5.2 In order to guarantee both conservation objectives and indigenous and other traditional peoples' rights in areas which have been subject to armed conflict or dispute, governments (singly or in partnership with their neighbours in the region), and other relevant institutions, should develop agreements and measures to ensure that indigenous and other traditional peoples' terrestrial, coastal/marine and freshwater domains within protected areas are treated as zones of peace and reconciliation.

(Source: Beltrán, 2000).

3. Good practice guidelines

The IUCN/Cardiff series of Protected Area Management Guidelines is designed to help protected area managers, but also government officials, policy-makers, NGOs, community leaders, donors etc. Like all the guidelines in the series, these guidelines on TBPAs are not rules, but advice.

In this particular case, the guidance has been drafted for use in times of peace between the countries involved, when real co-operation is most easily achieved. However, much of it should be applicable and realisable during times of dispute, or even armed conflict. These guidelines should also be useful for encouraging a return to normalcy after periods of armed conflict. They complement the Draft Code for Transboundary Protected Areas in Times of Peace and Armed Conflict (Chapter 4).

As with all the IUCN/Cardiff guidelines, the advice here needs to be adapted to local conditions. They may need to be modified to achieve locally defined objectives, since they cannot cover all possible situations. Thus the primary objective is to encourage reflection and help identify what actions are best suited to the particular situation. In the light of experience, it is intended to revise and update this guidance from time to time. IUCN would therefore welcome feedback from users.

The guidance is set out under nine headings:

1. Identifying and promoting common values
2. Involving and benefiting local people
3. Obtaining and maintaining support of decision-makers
4. Promoting coordinated and co-operative activities
5. Achieving coordinated planning and protected area development
6. Developing co-operative agreements
7. Working towards funding sustainability
8. Monitoring and assessing progress
9. Dealing with tension or armed conflict

3.1 Identifying and promoting common values

All TBPAs share some common natural resource, ecosystem service, landscape feature or species, or some common cultural value. This may be a shared water body, a mountain, a desert, a rare mammal or an indigenous community. Quite apart from any peace objective, the existence of such a shared resource is a sound reason for co-operation in management. The following guidelines will help in the identification and development of common values:

- 3.1.1 Begin with small steps, usually involving parallel conservation measures in adjacent countries. Move on to increased dialogue and interchange and the sharing of information or joint surveys, to develop an understanding of the common resource. A joint forum can often assist this process. In all cases, a flexible and adaptive process should be adopted to accommodate the changing political, social, socio-economic and macro-economic conditions.

Example: The conservation of Indochina's forest biomes at the regional landscape level requires parallel and compatible action in Cambodia, Laos and Vietnam. This has been promoted by a donor-supported and coordinated transboundary approach to setting goals.

- 3.1.2 Develop a common vision based on the shared resource.

Example: It has been suggested that the conservation of the red-crowned and white-naped cranes will facilitate co-operation between North and South Korea in the possible development of a TBPA along the demilitarised zone (DMZ) between the countries.

- 3.1.3 Use this shared resource as a visible symbol so that it becomes a unifying theme. It could be used as a common logo for both TBPAs.

Example: A stylised bird logo has been adopted for the three state units in Austria's Hohe Tauern National Park. Another bird logo is used in the Neusiedlersee/Fertő parks across the Austrian and Hungarian border. A common name is used on both sides of the boundary in Karkonosze (Poland) and Krkonose (Czech Republic). The mountain gorilla is a unifying theme for a three-country protected area complex in Africa (see Box 3.1).

- 3.1.4 Support the work of other parties, such as NGOs, where this assists the TBPA, e.g. lobbying against an undesirable development.

- 3.1.5 Jointly promote the protected area in other fora, reinforcing the feeling of involvement in something special and gaining recognition, while contributing to regional co-operation.

Example: Consider whether it is appropriate to prepare a joint nomination for World Heritage, Ramsar or Biosphere Reserve status.

Box 3.1 Virunga International Gorilla Conservation Programme (IGCP)

The IGCP is a joint initiative between three protected area authorities and three non-governmental conservation organisations: the Institut Congolais pour la Conservation de la Nature, the Office Ruandais de Tourisme et des Parcs Nationaux, the Uganda Wildlife Authority, the African Wildlife Foundation, Fauna and Flora International, and WWF. The IGCP was launched in 1991 with the goal of ensuring the survival and long-term conservation of the mountain gorilla and the regional afro-montane forest's biodiversity in north-west Rwanda, south-west Uganda and eastern Congo.

A press release (24 January 2001), issued jointly by the AWF, WWF and FFI, announces the finding that there has been a significant (10%) increase in the population size of the highly endangered mountain gorillas. It is noted that this success "proves that, even in a region where everyone has focused on the conflict and crises, there is hope.... There is a future for both people and wildlife when people work together despite political differences".

- 3.1.6 Publicise those features (e.g. a river or mountain range) and facilities (e.g. a trail) of the protected areas which run across the boundary.
- 3.1.7 Collaborate in tourism promotion, focusing on how the protected areas and countries complement one another. Co-operation in tourism product development (e.g. trail and site design and location, or marketing strategies that take advantage of the “Parks for Peace” concept) can improve the efficiency and effectiveness of such investments.

Example: This could be a suitable approach for the Semliki Game Reserve, the Rwenzori Mountains National Park (both in Uganda) and the Virunga National Park (Democratic Republic of the Congo), where the individual components might not present an attractive long-haul destination. In this case, it would also help to convince political leadership that there are benefits in maintaining a secure environment for tourism, in a region that has suffered badly from the effects of armed conflict.
- 3.1.8 Host joint events that promote common values, such as a TBPA working session, a nature writers’ workshop, or meetings for local park residents or users.
- 3.1.9 Share field days and festivals involving local communities (see for example Box 3.2).
- 3.1.10 Focus on the issues which unify, rather than those which divide. The essence of TBPAs is co-operation across a boundary. A focus on the boundary itself can detract from the purpose of co-operation.

3.2 Involving and benefiting local people

For all protected areas, including TBPAs, community involvement in protected area planning, policy formulation and management is essential. There is now a large array of literature on this topic (see for example Borrini-Feyerabend, 1996, 1997; Borrini-Feyerabend *et al.*, 2000; Development Studies Network, 2000; Kothari *et al.*, 1996; Lewis, 1996; McNeely, 1995; Stevens, 1997; Stolton and Dudley, 1999; Warner, 2000; Wells *et al.*, 1992). Community involvement, especially where indigenous peoples are concerned, is however particularly important in transboundary situations. Many communities living on the borders between countries or sub-national jurisdictions have suffered from artificial divisions imposed by political boundaries that separate families

Box 3.2 Ways of bringing communities together

Social events are very useful to promote or consolidate common values, both at staff level and local community level. In the Alpi Marittime (Italy)/Mercantour (France) protected areas, a field day is organised each year for the staff, involving skiing competitions and field games. The staff also participate in the festivals organised by local people: the Italian Rye festival takes place each year in Sant’Anna di Valdieri on the Italian side. On this occasion, many local French people, some of whom have Italian roots, come across the mountain passes to participate in the festival.

and peoples, and even turn neighbouring communities into adversaries. Communities in remote border areas may also suffer disproportionately from poverty and inequitable access to services.

Just as TBPA are a useful tool to maintain or restore ecosystems and natural areas separated by political boundaries, so they can serve to reunite communities and peoples, rebuild common understanding and values, and establish a basis for constructive co-operation. For this to happen, however, the interests, aspirations, and rights of indigenous peoples and local communities have to be respected and taken into account – see Box 2.5 above.

The essential actions that need to be taken to lay the foundations for effective community involvement in TBPA include:

- 3.2.1 Engage early in discussions with indigenous peoples and local communities inhabiting all jurisdictional zones of the TBPA, or using their resources. Dialogue should be about the concept, process, and implications of TBPA establishment and management. Fact-finding missions and expert advisors may assist in the identification and analysis of issues of concern to local stakeholders.
- 3.2.2 Work with peoples and communities concerned to identify the shared values and interests that can support nature conservation and sustainable resource use, and which also form the basis for co-operation among communities and with TBPA institutions. Ensure that similar approaches are adopted when engaging with communities in each country.
- 3.2.3 Identify cultural values and resources that communities of the various jurisdictions concerned deem to be important, and which can reinforce and complement the conservation of biodiversity in the TBPA.
- 3.2.4 Identify as soon as possible any actual or potential disputes among the communities in the different jurisdictions, as well as between them and conservation objectives. This may involve disputes related to access to natural and/or cultural resources, or to trafficking or other illegal activities. Support and facilitate conflict management processes whenever necessary. Ensure that protected area personnel are aware of the nature of actual and potential disputes.
- 3.2.5 Identify and address problems and needs related to land and to natural and cultural resource rights in the TBPA region, particularly where they might be affected by national security or other state policies in border regions.
- 3.2.6 Strive to achieve support from decision-makers in all jurisdictions concerned, for prompt and lasting solutions to any disputes. It is important to ensure that relevant international and regional human rights and environmental standards should be complied with, as this may facilitate the resolution of disputes. The rights and needs of minorities and indigenous peoples, the aged, women, youth, children and disadvantaged people should be recognised and accommodated in planning and management.
- 3.2.7 Ensure that negotiation, planning and implementation processes are transparent, not only *within* each jurisdiction, but also across boundaries. Ensure that relevant information is readily available and accessible in the appro-

priate languages and in all jurisdictions involved: unequal access to information can cause suspicion.

- 3.2.8 Put in place education and information strategies for indigenous peoples and local communities about the benefits and functions of the TBPA, as well as about their rights and responsibilities. This should stress the role that the TBPA can play by helping the communities involved to come closer together, improve mutual understanding, assist in cultural revitalisation, and resolve disputes over the sharing of natural resources.
- 3.2.9 Implement actions aimed at supporting and strengthening local institutions involved with the TBPA, aiming to empower institutions that represent local communities from the different countries or other sub-national jurisdictions.
- 3.2.10 Identify opportunities for sustainable economic development which could generate benefits for the local people, such as support for ecotourism, local cultural heritage, local industries, transport and appropriate infrastructure. Support their implementation in such a way that benefit sharing occurs throughout all jurisdictions concerned.
- 3.2.11 Incorporate biodiversity-related traditional knowledge and cultural information from indigenous peoples and local communities into planning, management and monitoring activities, and highlight those elements that are shared by communities from different jurisdictions.
- 3.2.12 Implement activities that further understanding and co-operation among the communities concerned, such as cultural events, market days and joint projects.
- 3.2.13 Support activities that could have a healing effect on the relationships between communities which have suffered from armed conflict in the past.
- 3.2.14 Involve local and regional NGOs and community-based organisations which may have established partnerships with local communities, and built a relationship of trust.

Example: In the Lubombo Transfrontier Conservation Area between Swaziland and Mozambique, the Italian NGOs Legambiente and Cospe have helped local communities in sustainable natural resource management. This is done in conjunction with the Lubombo Conservancy, which is a combined effort of state, private sector and community protected areas, and which the Peace Parks Foundation has supported.

3.3 Obtaining and maintaining support of decision-makers

Whilst support of decision-makers is an essential element for long-term success of a TBPA, consistent backing is also needed from policy and decision-makers of all the countries or other jurisdictions involved. Having strong support in one of the countries but a lack of interest in the other will probably ensure that the initiative fails.

The following guidelines have been successfully applied in a number of trans-boundary initiatives:

- 3.3.1 Obtain information about any high-level bilateral or multilateral co-operation agreements between or among the countries concerned, especially concerning natural resource management, tourism or other forms of

economic development. These often provide a rationale for developing local level initiatives, and can influence the relevant authorities to lend support to the proposed TBPA.

Example: the Binational Technical Commissions established between Costa Rica and Panama addressed a range of issues, including natural resources, cartography and economics, which provide a framework for TBPA development.

3.3.2 Seek official endorsement for “on the ground” activities, and keep the respective departments of foreign affairs informed, as it is difficult to proceed beyond simple friendly relationships without this support.

3.3.3 Consult with the security authorities, keep them informed and win their support. It is most important to stress to authorities that the TBPA does not involve the loss of sovereignty over the area concerned.

Example: In the Korup (Cameroon) and Oban (Nigeria) TBPA, the security authorities were extremely reluctant to sanction what was perceived as a “people-free” zone in the border area.

3.3.4 Encourage industry stakeholders, local communities and indigenous people’s organisations to raise political awareness at different levels (from local to international) on the benefits of TBPA co-operation.

3.3.5 Publicise widely what new markets or economic opportunities have been opened as a result of transboundary co-operation.

3.3.6 Publicise widely what achievements have been obtained in the conservation and management of biodiversity as a result of transboundary co-operation.

3.3.7 Look for opportunities to involve the media on a regular basis from the beginning of the transboundary co-operation programme.

3.3.8 Explore and promote linkages with local politicians and other influential decision-makers who are interested in the project and have influence at national and political levels. Encourage political leaders to participate in high profile events related to transboundary co-operation, such as at the openings of cross-border trails, visitor centres, training sessions or joint festivities.

3.3.9 Consult and involve, as far as possible, government departments and agencies with related responsibilities, notably for land-use planning, tourism development, local government, agriculture, forestry and maritime affairs.

3.3.10 Promote the harmonisation of the relevant legislation and regulations across each component of the TBPA.

3.3.11 Seek the maximum delegation of powers and responsibilities from the central government in each country to facilitate the day-to-day implementation of agreed conservation and management programmes.

3.3.12 Host joint events that promote common values and political support (see also 3.1.8).

3.3.13 Seek endorsement and support from a third party, such as an international NGO, which will promote and lobby for the project with national and

international authorities. NGOs are able to “speak out” where they perceive government not to be acting in the interests of the environment.

- 3.3.14 Be aware of, and use international agreements and processes, such as the World Heritage Convention, the Ramsar Convention, and the UNESCO MAB Programme; put forward the TBPA for any international awards or certificates, to achieve wider recognition, such as the European Diploma. Many such programmes are sympathetic to joint cross-border applications, channelled through respective governments.
- 3.3.15 Seek support from high profile persons or leaders (distinguished national figures, writers, media personalities, artists, etc.) who can serve as “patrons” to promote transboundary co-operation and seek support from decision-makers.

3.4 Promoting coordinated and co-operative activities

The importance of friendly relations at the protected area level is well illustrated by a quotation in Box 3.3. In practice, such co-operation needs to occur at two levels, and for each there is a set of guidelines:

- Staff development and commitment
- Collaboration in on-the-ground activities

Guidelines for staff development and commitment

- 3.4.1 Demonstrate through leadership the importance to be attached to transboundary co-operation.

Example: In the Waterton-Glacier International Peace Park, the two park superintendents lead staff each year on a back-country hike.

Box 3.3 The importance of friendly relations

“Transfrontier protected areas should unite not only nature, but also nations. A careful development of human contacts should therefore be regarded not as an official service task, but as a personal obligation of all staff members of both protected area administrations, and be widely understood as such. The development of such friendly relations between the staff of both protected area administrations is an encouraging factor. Besides personal invitations, this involves also mutual venues, evening campfires with beer and roasted pork and jolly good songs. At present we are preparing a joint trip of the protected area administrations into the ‘Podyji’ (Thaya River Valley) National Park on the border of Moravia and Lower Austria. Our co-operation would be considerably poorer without this human dimension, our mostly orthodox way of work would be much more difficult and our lives deprived.” – Directors of Elbe Sandstones Protected Landscape (Czech Republic), and Saxonian Switzerland National Park and Protected Landscape (Germany).

(Cerovský, J., 1996).

- 3.4.2 Where there are marked cultural and/or religious differences across boundaries, it is important to promote greater awareness, sensitivity and education on the history of each country.
Example: Training sessions can be held, such as the US National Park Service seven-day course on “Getting to know Mexico”.
- 3.4.3 Where languages differ significantly, provide language training in each other’s language as needed. At a minimum, this should include reference dictionaries of commonly-used technical and scientific words. It is particularly desirable that any focal points or coordinators (see 3.4.6) are able to communicate in the relevant languages.
Example: Training in Italian and French is carried out in Alpi Marittime and Mercantour TBPA.
- 3.4.4 Ensure common levels of professionalism in management and operation. Where levels of development are uneven, initiate joint professional development of staff. This will promote morale and co-operation by “growing together”.
- 3.4.5 Share staff expertise, both within one transboundary site, and across different transboundary sites, including through short and long-term staff exchanges, study tours, workshops, documentation of experiences, etc.
- 3.4.6 Seek the designation of a focal point in each country, or the appointment of a coordinating body or individual coordinator for each country.
- 3.4.7 Establish joint technical groups for the study or development of common issues. These groups can then make recommendations to each potential area (see Box 3.4).
- 3.4.8 Hold periodic joint technical meetings to discuss and address issues of mutual interest. These may include talks by an outside expert or discussion leader.

Box 3.4 The Australian Alps Liaison Committee (AALC)

This committee is made up of senior representatives of each of three agencies: National Parks and Wildlife Service of New South Wales, Environment Australian Capital Territory, and Parks Victoria. The success of the committee depends on the capacity of all members to make decisions on behalf of his or her agency. Without this level of representation and delegation, the committee would have difficulty operating. Four working groups currently exist to assist the AALC: Community relations; Recreation and tourism; Natural heritage; and Cultural heritage.

The working groups consist of representatives of each of the agencies, generally at a ranger or project officer level. These groups must have effective channels of communication with other agency staff. To this end at least one of the working groups has two representatives to provide input from a centralised specialist unit, and from the staff in the park. Working groups need to be encouraged to work closely with staff, seeking input and involvement in project proposals and management rather than taking on the responsibility of all projects. Where a working group has achieved the objectives for which it was established, it is disbanded. Ongoing monitoring of progress occurs through the AALC.

- 3.4.9 As far as possible, ensure that communication systems such as radio and computer are compatible. Encourage rapid and low-cost electronic communication.
- 3.4.10 Supervisors should permit and encourage exchanges of information among staff members at all levels. Information exchange can be a powerful unifying force.

Examples: In the Maloti-Drakensberg (Lesotho-South Africa), there has been agreement to develop a compatible Geographic Information System for data collection and analysis. In Indochina, a compatible transboundary data management programme has been developed among the four countries involved (Cambodia, Laos, Thailand and Vietnam).

Guidelines for collaboration in on-the-ground activities

- 3.4.11 Start with relatively small, concrete joint projects concerning unifying themes or critical shared problems.
- 3.4.12 Standardise resource data collection methods, forms and timing, and share information. Develop a bibliography and collection of relevant publications.
- 3.4.13 Jointly manage species that cross the boundary diurnally or seasonally (e.g. marine mammals, migratory elephants or fish in an international river).

Example: The Vanoise National Park (France) and the Gran Paradiso National Park (Italy) co-operate in managing the ibex population, which moves seasonally across the frontier. In Manas Tiger Reserve (India) and Royal Manas (Bhutan), which span the tigers' home range, the authorities co-operate in poaching control.

- 3.4.14 If possible, remove existing barriers to animal movement, e.g. the fences which were erected along the Iron Curtain in eastern Europe, and which still impede animal and human movement within some TBPAs.
- 3.4.15 Collaborate in handling pest outbreaks that can cross borders. It is futile to treat only one side, for the other is likely to be a continuing source of infection.
- 3.4.16 Collaborate in dealing with emergencies. For example development of a joint fire plan, including co-operation in fire detection, suppression or management, and fire training (see also Box 3.5). Collaborate in contingency planning for oil spills and safeguarding marine protected areas. The International Maritime Organization (IMO) has guidelines available for oil spill containment (IMO, 1995).

Box 3.5 Examples of contingency planning

Boundary Water Canoe Wilderness Area (USA) and Quetico Wilderness Provincial Park (Canada) have a memorandum of understanding on fire detection and suppression and a joint fire plan. A Letter of Intent between USA and Mexico protected areas in the Big Bend area has led Big Bend National Park to recruit and train wildland fire fighters from adjacent Mexican villages to supplement its own fire suppression forces.

- 3.4.17 Collaborate in search and rescue activities, including periodic training of staff in emergency preparedness.

Example: Under an agreement between the two countries, Nepalese helicopters provide rescue services in the Qomolangma Nature Preserve in China adjacent to the Makalu Barun Conservation Project, as well as in Mount Sagarmatha/Qomolangma TBPA.

- 3.4.18 Collaborate in the control of alien species invasions and in quarantine practices. Removal of aliens on only one side of a boundary will often be followed by re-invasion (Shine *et al.*, 2000).

- 3.4.19 Conduct joint species re-introduction programmes to maximise the chances of success. Reintroduction may especially be needed to restore damaged ecosystems, e.g. after armed conflict. Alpi Marittime Nature Park (Italy) and Mercantour National Park (France) have successfully collaborated in the reintroduction of the bearded vulture. The IUCN Species Survival Commission has an excellent leaflet on re-introductions (IUCN/SSC, 1995).

- 3.4.20 Plan trail systems that connect all parts of the TBPA. Use multilingual signage if necessary. If a national frontier is involved, explore arrangements with customs and immigration that would permit border crossing without legal problems.

Example: Cross-border movement is now facilitated across the European Union and is possible also across the Canada/USA border in the Waterton-Glacier International Peace Park. In the Kgalagadi Transfrontier Park (South Africa-Botswana), the border posts have been moved to the entrance gates of the park in each country, thereby allowing free movement for visitors within the TBPA.

- 3.4.21 Plan and carry out joint research activities. This can include information exchange, shared research in the field and development of a single proposal for outside funding. Compile bibliographies of existing information. Jointly discuss and agree on research priorities.

Example: Costa Rica and Panama have entered into a Border Co-operation Agreement that provides for joint research studies. Such studies have also been undertaken in Tatra National Parks in Slovakia and Poland.

- 3.4.22 Design and implement co-operative long-term ecological and socio-economic monitoring.

Example: Through their Border 21 initiative, the USA and Mexico have jointly developed a set of environmental indicators which will measure and monitor progress in environmental protection along their 3,200km border. The protected areas along the border are a major component of this initiative.

- 3.4.23 Carry out joint environmental education and awareness activities, such as travelling exhibits and field courses; and develop visual aids and curriculum materials that emphasize bioregional or cross-cultural aspects.

- 3.4.24 Co-operate to address poaching in the TBPA area.

Example: Efforts have been successful in the Parc National des Volcans (Rwanda)/the Mikeno section of the Parc National des Virunga (Democratic

Republic of the Congo)/Mgahinga Gorilla National Park (Uganda) and between the Nimule National Park (Sudan) and Uganda, where the Uganda Wildlife Authority established game posts in the border area to prevent incursions into the park.

- 3.4.25 Co-operate in planning and implementing strategies to counteract illegal activities, such as smuggling, drug running, illegal wildlife trade or illegal immigration.

Example: There is co-operation between the two Mount Elgon National Parks (Kenya/Uganda), where coordinated nature conservation law enforcement regarding illegal cultivation has stimulated the development of other conservation programmes between the two countries.

- 3.4.26 Share production of materials so as to secure the economies of joint production and enhance common values, e.g.

- Develop a common logo or a shared name such as the Nyika National Park (Malawi/Zambia). In the border complex of Big Bend/Maderos del Carmen/Cañón Santa Elena (Mexico) they are adopting as a joint symbol “Los Dos Aguilas – The Two Eagles”.
- Prepare a single map or visitor’s guide such as those used in the Waterton-Glacier International Peace Park (Canada/USA) and the Bayerischewald National Park/Šumava National Park (Germany/Czech Republic), which is printed in both languages.
- Develop common interpretative material development and publication, including travelling displays, such as the material developed by the Krkonose/Karkonosze TBPA (Czech Republic/Poland).
- Use a joint approach to tourism marketing and in approaches to the tourism and travel industry. Botswana and South Africa are working together in promoting appropriate tourism in the Kgalagadi Transfrontier Park.
- Introduce a common code of conduct for visitors, based on harmonised rules and visitor management strategies.
- Prepare a transboundary newsletter, radio broadcast and/or web site to keep all staff and head offices informed, thus helping to foster the common vision and values. This has been done in the Australian Alps TBPA.
- Establish a shared visitor information centre on or close to the boundary, which would have great appeal to visitors and would be more cost-effective than two or more facilities. This has been done in the case of the Bayerischewald National Park (Germany) and Šumava National Park (Czech Republic).

3.5 Achieving coordinated planning and protected area development

Planning is essential if the purposes of protected areas are to be translated into effective programmes for management and development. Integrated planning ensures that all interests are included and that the consequences of decisions for sectoral programmes are fully evaluated. The process of planning, if handled in a participatory manner, can promote commitment and empowerment among stakeholders, as well as capacity-building where there is unequal experience or skill.

In the context of TBPA, there is a distinct risk of incompatible planning, which can result in the juxtaposition of incompatible activities in areas on either side of the boundary. For example, the zoning of a wilderness area on one side of a boundary could be compromised by development on the other. 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. The following guidelines will enhance coordinated TBPA planning and management.

- 3.5.1 Joint strategic planning is a good method of securing the involvement of participants at all levels. It is useful to involve not only the proponents of transboundary co-operation, but also the potential critics.
- 3.5.2 Initiate a coordinated planning process and task team, involving protected area managers, scientists and major government and community stakeholders from both countries or sub-national jurisdictions, supported by public participation and communication programmes.
- 3.5.3 Conduct joint training, especially using participatory methods, in bioregional planning for protected area management personnel. Involve also the planning authorities and local communities affected by the TBPA.
- 3.5.4 Formulate a zoning plan for the whole TBPA area, based on a shared vision, an analysis of resource values and a review of opportunities and constraints. In particular, discuss and resolve issues that result from the juxtaposition of policies for the protection of resources such as wilderness areas, with incompatible development on the other side of the boundary.
- 3.5.5 Formulate joint or complementary management plans and facilitate joint management meetings on strategic transboundary elements of these plans.
- 3.5.6 Consider altering the status of protected area designations, as the TBPAs achieve larger size and sustainability, and can involve more stakeholders. The presence of a TBPA may also be used to achieve compatibility of protected area classification among the component areas, and secure a similar level of importance in each country involved.
- 3.5.7 Prepare an overall TBPA development plan which ensures that infrastructure in each component of the area is appropriately sited. Visitor facilities should be planned and managed so as to enhance the purpose of the protected areas. Ensure that development plans are compatible with regional development frameworks, e.g. the Development Plan for the border regions agreed by El Salvador, Honduras and Guatemala.
- 3.5.8 Where possible, develop common or compatible Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA) pro-

Box 3.6 Maloti-Drakensberg Transfrontier Conservation and Development Area (Lesotho/South Africa): Extract from Draft Memorandum of Understanding

Section 8.01. Without limitation upon the other provisions of this MoU or other existing obligations between the Parties, the Parties shall, in respect of the Area:

- (a) Maintain and expand, on the basis of criteria and procedures approved by the Steering Committee, a database register containing relevant information on the Area.
- (b) While committed not to engage in any activity that may, directly or indirectly, generate transboundary adverse environmental impact, provide prior and timely notification and relevant information on any activity that may have a significant transboundary environmental impact.
- (c) Undertake an environmental impact assessment of any development initiative in the Area in accordance with the domestic laws of the respective Parties. Copies of the relevant assessment shall be provided to the Steering Committee for comment and recommendations to the relevant authorities of the Parties.
- (d) Ensure, to the extent possible, local participation in decision-making processes, including the provision of access to information concerning the policies and activities in the Area.
- (e) Within five years of the coming into effect of this MoU, take into consideration for adoption, through their respective domestic procedures, a zoning plan for the Area.

cedures, (including Social Impact Assessment), to ensure that development activities on one side of the border are not incompatible with the conservation and management objectives on the other side. Even though procedures may be very different in each country, it would be an advantage if it was agreed to submit development proposals or SEA/EIA reports to the other party for comment before decisions were made.

Example: This last provision has been included in the Memorandum of Understanding between South Africa and Lesotho for the Maloti-Drakensberg Transfrontier Conservation and Development Area (see Box 3.6).

- 3.5.9 Make it a high priority to notify the other parties should any occurrence take place, or any activity be contemplated, which might have transboundary implications or impacts.
- 3.5.10 Consider the development of linked tourism products as well as marketing and management programmes, as is done at Victoria Falls (Zambia and Zimbabwe).
- 3.5.11 Agree on, and implement common or joint monitoring programmes to assess improvement or decline in protected area resources.

3.6 Developing co-operative agreements

Both formal and informal agreements can be used to declare common interests, agree on objectives, state guiding principles, and plan and implement management programmes.

They are essential to sustain co-operation in the transboundary context. They are needed to secure the endorsement of relevant authorities and accountability among the stakeholders.

Agreements will differ widely according to the level (e.g. international, national, or sub-national), and the partners (e.g. communities, agencies and governments). Depending on the context, there may be a need for agreements to be formalised before co-operative programmes can be initiated; often, though, practical experience in co-operation will create the conditions which favour the subsequent greater formalisation of agreements. The following guidelines are relevant (see also paragraph 12, Draft Code, Chapter 4):

- 3.6.1 Promote co-operation between national and sub-national tiers of government with jurisdiction or involvement in a TBPA, and clearly define roles and responsibilities.
- 3.6.2 Ensure that relevant government ministries, agencies and counterpart institutions co-operate with one another and provide mutual support.
- 3.6.3 Support public/private partnerships and use these to help leverage resources and skills in support of TBPA initiatives.

Box 3.7 Options for transboundary agreements

1. A formal agreement or bilateral/multilateral treaty to bind the parties to long term and accountable co-operation.
Example: The Bilateral Agreement between Botswana and South Africa to recognise the Kgalagadi Transfrontier Park in 2000 (Appendix 5).
2. Administrative instruments such as memoranda of understanding (MoU) developed between key agencies, departments or ministries.
Example: In the Australian Alps National Park (nine separate units, three political sub-national jurisdictions, plus the Commonwealth Government) a formal Memorandum of Understanding has been in force since 1986. A copy of this Memorandum is appended (Appendix 6). It spells out specific areas of collaborative activity.
3. A more limited agreement to address specific issues, such as a protocol or contingency plans for dealing with emergencies or incidents like oil spills, fire, pest control or search and rescue operations.
Example: Waterton Lakes (Canada) and Glacier (USA) National Parks were united symbolically in 1932 as the world's first International Peace Park. In 1986, the two parks agreed a Co-operative Reciprocal Agreement regarding mutual aid in the areas of fire control, and search and rescue.
4. Informal agreements could be considered by the managers to promote co-operative, friendly relations where the situation is not favourable to more formal arrangements.
5. Another option is to consider offering representation on each other's advisory or management bodies.
Example: In Alpi Marittime (Italy) and Mercantour (France) TBPA, a representative from each management authority sits on the advisory committee of the other.
6. Consideration could also be given to the establishment of a TBPA policy advisory committee to include stakeholders, especially local community members.

- 3.6.4 Foster co-operation and formulate agreements for consultation and liaison involving local communities, including their appropriate involvement in planning and management.
- 3.6.5 Obtain information on existing international or sub-national agreements on resource use or conservation, since these may provide a basis for new agreements governing fisheries, regional seas and shared water resources, (e.g. river basins).
- 3.6.6 Consider the appropriate form of agreement suited to the needs of the situation. Box 3.7 sets out a range of options for different kinds of agreements. Note that these can sometimes be used in combination. Note too that it may be necessary to conclude an agreement between the key authorities on one side of a boundary before embarking on a transboundary agreement. For example, a memorandum of understanding may be needed to ensure that national, provincial and local governments, statutory bodies and non-governmental organisations are committed to working co-operatively in a transboundary programme.
- 3.6.7 As noted elsewhere (see Section 2.3.1), consider also the options for establishing a transboundary international designation.

3.7 Working towards funding sustainability

Transboundary co-operation has human and financial implications that need to be considered at the outset. Time, money and effort must be invested to secure the many benefits of such co-operation. Staff time will be needed in negotiation, opening dialogue between protected areas and with the local communities involved. Travel and implementation of joint meetings is often a demand on both staff time and budgets (Financing Protected Areas Task Force, 2000).

Joint training sessions, often involving additional language training or capacity building, can be costly. There may be institutional or legal constraints that limit transfers or investments in human and financial resources between adjoining countries. Nevertheless, the separate parts of a TBPA should consider co-operation, and seeking funds for it from donors, the private sector or the NGO community. The following guidelines will enhance the prospects for financial sustainability:

- 3.7.1 Identify at an early stage the likely costs for each party, and the potential sources for funding for work to be undertaken jointly.
- 3.7.2 If transboundary co-operation is to be sustainable, it cannot depend for ever on large external sources of funding. So, as far as possible, keep expectations within the financial resources available (but not if this implies doing nothing). There is a great deal which can be accomplished just by incorporating transboundary “thinking” into normal management operations, and being opportunistic regarding the use of available funds.
- 3.7.3 Set up specific co-operative budgets as integral parts of TBPA financial plans, which will support joint activities by the protected areas involved. There may already be budget lines for management activities that might support joint action (see Box 3.8 for examples of cost and benefit-sharing).

Box 3.8 Some examples of cost and revenue sharing

In the Australian Alps, the special budget for co-operation is contributed by three states and by the Federal government. Funds are awarded out of it on a competitive basis for joint project proposals. In the Elbe Sandstones (Czech)/Saxonian Switzerland (Germany), a revenue-sharing mechanism has been established for boat trips along the international boundary river. In the case of the Kgalagadi Transfrontier Park (Botswana/South Africa), the parties undertake to achieve an equitable apportionment of revenues generated by the Parks, with equal sharing of the audited gate fees (see also Appendix 5).

- 3.7.4 Identify opportunities for implementing new joint revenue-generating activities, such as tourism and marketing, whilst involving the private sector and local communities as appropriate. Where appropriate, establish mechanisms for sharing revenues across the borders. This is especially necessary when income accrues mainly to one partner even though joint resources are used (see also Box 3.8).
- 3.7.5 Develop joint project proposals to achieve better conservation and sustainable use of natural and cultural resources shared by the protected areas involved, and initiate joint fundraising activities. The development and joint promotion of such projects is likely to enhance the chance of getting additional funding from the donor community. Potential donors such as multilateral and bilateral aid agencies, NGOs and the private sector, should be identified, and information obtained from them about their priorities for investment, formats for project proposals and project development cycle. In some cases, donors may have difficulty in funding binational or multinational projects: the prospects are improved by approaching donors which have either a regional programme or country offices in each of the countries concerned.
- Example:* In the Mount Elgon National Parks (Uganda/Kenya), IUCN is involved in a complementary programme in each country. In the Maloti-Drakensberg Transfrontier Conservation and Development Area (Lesotho/South Africa), the World Bank/GEF will fund a parallel programme in each country to ensure the conservation and sustainable use of this area of global biodiversity significance.
- 3.7.6 Identify charismatic flagship species and other symbols of the TBPA, to be used for fundraising and marketing purposes. This will not only benefit TBPA management, but will also have positive impacts on the survival of the species concerned, e.g. the condor in the Peru/Ecuador Cordillera del Condor.
- 3.7.7 Ensure that the extra time needed by the protected areas staff in collaborative activities is identified and accounted for in management and financial plans, and is approved of by each administration.
- 3.7.8 Explore options for innovative financial mechanisms to support the TBPA, such as debt-for-nature swaps, trust funds and carbon-sequestration credits.
- Example:* A regional trust fund has been established by the International Gorilla Conservation Programme (IGCP) for the Virunga Volcanoes three-country TBPA.

- 3.7.9 Direct coordinated fundraising campaigns at the public throughout each of the jurisdictions involved, highlighting how the TBPA helps achieve national peace and co-operation objectives that are of interest to the entire population.
- 3.7.10 Consider the use of company law, for example, to set up a non-profit company to manage TBPA funds in one of the countries involved, where there is no legal means of managing a joint fund. Other options include the use of a Foundation to secure financial and other support.

Example: An innovative mechanism is the Kgalagadi Transfrontier Park Foundation set up by South Africa and Botswana to direct the activities of the Kgalagadi Transfrontier Park. Under the bilateral agreement, the Foundation is empowered to receive donations from third parties and to distribute them equitably to the implementing agencies: the Botswana Wildlife Department and South African National Parks. Appendix 5 contains the full bilateral agreement.

3.8 Monitoring and assessing progress

These guidelines aim to help protected area managers to use TBPAs as a vehicle to promote and enhance co-operation across political borders. It is important to monitor and assess progress using a simplified evaluation approach where possible. The guidelines developed by the IUCN/WCPA Management Effectiveness Task Force for evaluating the effectiveness of protected areas provide a useful framework for monitoring and evaluating progress in any protected area (Hockings *et al.*, 2000).

For TBPAs, Zbicz (1999b) defined six levels of co-operation, using a range of criteria, which can guide managers in determining the degree of progress towards full co-operation (see Box 3.9). As a rule of thumb, the level of co-operation should reach at least Level 1 in order for internationally adjoining protected areas to be recognised as TBPAs. In addition, the following suggestions are offered to enhance monitoring of the effectiveness of TBPAs:

- 3.8.1 Each point covered in these guidelines can be used as a check list to assess progress in promoting and enhancing co-operation. A systematic check, at two or three year intervals, of how many of the points covered in the guidelines have been implemented, will give an idea of progress and help to identify problems that need to be resolved.
- 3.8.2 Measure the effectiveness of joint activities. Having a joint management plan for the TBPAs is a good step forward, but what really matters is the extent to which the joint management plan has been implemented.
- 3.8.3 Assess the extent that local communities have benefited from the programme. Getting local communities involved in TBPA management is certainly an achievement, but they should receive tangible benefits that can be directly related to transboundary co-operation. It is important to know whether communities involved in the initiative have:
 - better access to resources across each others' national/sub-national border;
 - been able to open new markets or economic opportunities arising out of co-operation, such as those related to tourism development on both sides of the borders;

Box 3.9 Levels of co-operation between internationally adjacent protected areas. Adapted from Zbicz (1999b)

Levels of co-operation	Characteristics
Level 0 No co-operation	<ul style="list-style-type: none"> ■ Staff from two protected areas (PAs) never communicate or meet ■ There is no sharing of information or co-operation on any specific issues
Level 1 Communication	<ul style="list-style-type: none"> ■ There is some two-way communication between the PAs ■ Meetings/communication takes place at least once a year ■ Information is sometimes shared ■ Notification of actions which may affect the other PA will sometimes take place
Level 2 Consultation	<ul style="list-style-type: none"> ■ Communication is more frequent (at least three times a year) ■ Co-operation occurs on at least two different activities ■ The two sides usually share information ■ Notification of actions affecting the adjoining PA 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 PAs actively co-operate on at least four activities, sometimes coordinating their planning and consulting with the other PA before taking action
Level 4 Coordination of planning	<ul style="list-style-type: none"> ■ The two PAs communicate often and coordinate actions in some areas, especially planning ■ The two PAs work together on at least five activities, holding regular meetings and notifying each other in case of emergency ■ PAs usually coordinate their planning, often treating the whole area as a single ecological unit
Level 5 Full co-operation	<ul style="list-style-type: none"> ■ Planning for the two PAs 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 PAs as a whole ■ Joint management sometimes occurs, with co-operation on at least six activities ■ A joint committee exists for advising on trans-boundary co-operation

- benefited from lowered tension or fewer disputes over access to natural resource use.
- 3.8.4 Assess the extent that the programme has achieved a public profile. Is it getting the attention of the media? How many people “out there”, in addition to those involved in the initiative, know about it? Is the general public receiving the message about the results and outputs from co-operation activities? As a result of media and public support in the countries/jurisdictions involved, are additional resources for management being made available?
- 3.8.5 Evaluate the level of support from policy and decision-makers. Are all parties involved in co-operation getting the message across to local politicians in order to influence national authorities and political structures? If a formal agreement did not exist before local co-operation started, has this process paid off by promoting a bilateral agreement between the countries/jurisdictions involved?
- 3.8.6 Evaluate donor support. Is any international donor support directly attributable to co-operation; has a joint proposal been made?
- 3.8.7 Evaluate the extent to which the objectives of the TBPA have been achieved including:
 - Obtaining additional resources;
 - Achieving more coordinated ecosystem management;
 - Averting ecosystem threats;
 - Promoting nature-based tourism;
 - Increasing management effectiveness;
 - Involving communities at all levels;
 - Promoting peaceful coexistence;
 - Sustaining a programme of joint meetings;
 - Maintaining free and open communication between all protected area staff.
- 3.8.8 Document these findings in a draft report which should be made available for public comment before finalisation. Recommendations should be primarily about aspects over which there is broad-based agreement amongst stakeholders, and negotiations should be encouraged in relation to contentious aspects.
- 3.8.9 Ensure that reports are conveyed to decision-makers for consideration, and that plans and programmes are adaptively revised and improved.

3.9 Dealing with tension or armed conflict

The Draft Code for Transboundary Protected Areas in Times of Peace and Armed Conflict, set out in Chapter 4, was developed as an integral part of the Parks for Peace initiative under the auspices of the IUCN Commission on Environmental Law and

WCPA. It provides States, jurisdictions and other stakeholders with a framework for the prevention, management and/or resolution of tension and armed conflict affecting TBPA.

This section of the Guidelines provides practical indicators for protected area agencies and managers with regard to situations of tension or armed conflict, and for implementing the provisions of the Draft Code.

- 3.9.1 Assist protected area personnel to become familiar with the Draft Code and to take steps to abide by its provisions.
- 3.9.2 Bring the Draft Code to the attention of the armed forces, border guards, customs services and other interested parties and encourage them to incorporate it into their training procedures and manuals.
- 3.9.3 Provide timely and accurate information to relevant authorities about adverse impacts on TBPA, particularly where a TBPA is being used for military or strategic purposes. Where possible, recommend appropriate actions to prevent or mitigate such impacts.
- 3.9.4 Maintain updated contact details and communicate with security forces on co-operative strategies to alert key authorities to damage to TBPA and to minimise the dangers.
- 3.9.5 In times of peace, develop mechanisms that can provide for strictly neutral liaison during times of armed conflict and during other difficult emergency situations that could compromise the integrity of a TBPA. Such liaison could be conducted by a third party identified in advance (e.g. ICRC, IUCN).
- 3.9.6 Train protected area staff to deal with situations of heightened tension or conflict and to maintain good communications, as this can reduce the damage inflicted on the TBPA and resident communities, both during and after any conflict. Training staff in self-defence and ground fighting techniques can help them to retain confidence on patrol.
- 3.9.7 If armed conflict appears imminent or breaks out, post the Draft Code in appropriate languages at prominent locations throughout the TBPA.
- 3.9.8 During times of armed conflict or other complex emergency situations affecting a TBPA, take responsibility, together with lead ministries, for mobilising an effective and appropriate response. Contribute, where appropriate, to a broader response to the humanitarian and environmental security crisis by contacting UN agencies, embassies and relevant organisations, provided there is no intent to give strategic advantage to any party involved in the armed conflict.
- 3.9.9 Continue normal operations in the TBPA as far as possible. Take necessary steps to secure the continued support of ministers, donors, international partners and others.
- 3.9.10 If staff have to be moved or evacuated for safety and security reasons, seek to minimise the risk of permanent loss of capacity in the region by relocating staff as close as possible in a safer, neighbouring region. As far as practicable, continue training and capacity building, notwithstanding the conflict situation.

- 3.9.11 Where refugee movement and concentration occurs in border regions, take steps to prevent or mitigate environmental damage to TBPA by making TBPA personnel and humanitarian agencies aware of the UNHCR Guidelines on Prevention of Environmental Impacts Related to Refugees Operations (UNHCR, 1996). Ensure that such guidelines are followed to the extent possible.
- 3.9.12 Co-operate with humanitarian and development agencies to give appropriate support to the rehabilitation of communities and individuals affected by armed conflict (see UNHCR, 1996 and recommendations on peace-building strategies, pp.1–8, Brahini Report, United Nations, 2000).
- 3.9.13 Once conditions permit, assess the need for environmental mitigation and respond appropriately, including through the possible re-introduction of displaced species. Useful references and guidance include the *Journal of Restoration Ecology* and the IUCN Species Survival Commission's *Guidelines for Re-introductions* (IUCN/SSC, 1995).

4. Draft Code for transboundary protected areas in times of peace and armed conflict

Explanatory notes

This Draft Code is offered to neighbouring States, jurisdictions and other stakeholders concerned with the establishment and management of TBPAs. It may be used in its present form or as a basis for developing a comparable code suited to the particular needs of a country or region. IUCN would welcome requests for technical assistance in interpreting the Draft Code and applying it to particular local or regional circumstances.

It is recommended that the Draft Code be made widely available to protected area authorities, key sectoral agencies, the armed forces (including border and coast guards), local governments, relevant non-governmental organisations, the media and other interested parties, especially in border regions.

A supportive education programme will be needed for this Draft Code to reflect the aims and guide the actions of all concerned interests. Awareness-building should be carried out on a continuing basis with all sectors of society, to foster broad acceptance of the need to conserve biodiversity and ecosystem services and to protect the integrity of TBPAs, even in emergency situations.

Rationale for the Draft Code

The Draft Code aims to contribute to the progressive development of legal and institutional frameworks for the establishment and management of TBPAs in times of peace or armed conflict.

Context

Many States, sub-national units and autonomous areas share at least one land, freshwater or marine boundary.

These boundaries were usually established for political or other social reasons, without reference to land or water systems. Often they divide ecosystems of particular importance for terrestrial or aquatic biological diversity.

Much of the world's remaining natural habitat is to be found in border regions, as political boundaries are often located in remote and sparsely populated areas with a distinct ecological identity to which animals, plants and human culture and practices have adapted over time. At the same time, border regions and their inhabitants may be particularly vulnerable to encroachment, dispute and armed conflict, which can be

caused or aggravated by environmental degradation or unsustainable patterns of land and water use.

Progress to date

Transboundary co-operation can take many forms. Many States and stakeholders in civil society are already actively engaged in bilateral and regional initiatives on environmental and humanitarian issues. Co-operation over shared natural systems and resources can lay the foundation for deeper, ongoing co-operation between neighbouring States, communities and other stakeholders. Moreover, the armed forces in many countries already play a constructive role in environmental conservation and management in border regions.

The international community, within and outside the United Nations system, has reached agreement on a series of legal instruments to address environmental and humanitarian issues. Many of these are particularly relevant to transboundary co-operation and to protection of border areas and communities (see Annex to the Draft Code).

Opportunities to extend transboundary co-operation

Natural systems that straddle political boundaries can be most effectively managed as functional units at the scale of the regional landscape and would therefore benefit from appropriate mechanisms for long-term transboundary co-operation. While the establishment of TBPA's for integrated conservation and development can enhance environmental protection, it can also reinforce political security and provide multiple benefits to local communities and indigenous peoples.

The existence of TBPA's and their buffer zones can help reduce tensions, rebuild divided communities, promote freedom of movement and create new opportunities for sustainable development, including low-impact regional tourism. Such areas can also make an important contribution to regional biodiversity conservation programmes, especially where they form part of a coherent ecological network. Neighbouring States, which often have different levels of technical expertise, knowledge, capacity and financial resources, can benefit by combining their respective strengths through transboundary co-operation.

Part I. Introductory provisions

1. Objectives

This Draft Code proposes an enabling framework to promote transboundary co-operation through the establishment and management of TBPA's in order to:

- a) conserve biological and cultural diversity in major transboundary ecosystems, promote a culture of peace and enhance opportunities for sustainable development, particularly for local communities, indigenous peoples and women;
- b) promote the conservation and environmentally sound management of transboundary water catchment areas;

- c) promote the sustainable and equitable utilisation of natural resources in and around TBPAs;
- d) contribute to the development of equitable mechanisms for co-operation and benefit-sharing;
- e) contribute to conflict prevention and the building of trust, confidence and security;
- f) prevent or minimise any adverse impacts of military activities on TBPAs; and
- g) provide a tool for the peaceful settlement of disputes affecting TBPAs and the re-establishment of peaceful conditions and restoration of damaged ecosystems after armed conflict.

2. Use of terms

For the purpose of this Draft Code:

- a) Transboundary¹ protected area (TBPA)” means an area of land and/or sea which straddles one or more boundaries between states, sub-national units such as provinces and regions, autonomous areas and/or areas beyond the limits of national sovereignty or jurisdiction, whose constituent parts are especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed co-operatively through legal or other effective means" (see Chapter 1.2, and Box 1.1).

A TBPA can be terrestrial, aquatic or mixed. Subject to national legislation, it may include land and water in public, communal and private ownership and management responsibilities may be allocated to public or private stakeholders.

- b) “State” should be interpreted, where the national context so requires, to include sub-national political units, such as provinces, regions and cantons, and autonomous areas that have competence for the establishment and management of protected areas.
- c) “Water” includes atmospheric, marine, ground and surface fresh water. References to “aquatic” should be interpreted accordingly.
- d) “Armed conflict” refers to any violent conflict, whether international or non-international, whether declared or not, and whether the parties to the armed conflict are regular or irregular armed forces.
- e) “Dispute” refers to any non-violent conflict.

¹ The Draft Code uses the term “transboundary” consistently with the terminology used in several treaties (e.g. Convention on Migratory Species, ASEAN) and by many institutions (e.g. Conference of the Parties to the Convention on Biological Diversity, IUCN – The World Conservation Union). However, it is recognised that appropriate terminology will vary between regions and countries. “Border” and “transborder” are commonly used in the United States but less in Europe or Africa. “Frontier” and “transfrontier” are used in Europe (the French translation is *transfrontalière*) and in Southern Africa, but are less appropriate to the American context. The terms “frontera” and “transfrontera” are widely used in Spanish.

3. Scope

This Draft Code applies to TBPAs that are managed, without prejudice to the sovereign equality and territorial integrity of the States concerned, to conserve biological and cultural diversity and promote peace and security.

Many of its provisions are also relevant to:

- a) areas managed for environmentally sound and sustainable development around TBPAs;
- b) natural areas located near to political boundaries that are or could be managed for conservation and peace objectives; and
- c) other protected areas within or beyond the limits of national jurisdiction.

Part II. Basic principles and duties

4. Environmental rights and responsibilities

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to utilise their resources to meet their environmental and sustainable development needs, and the responsibilities:

- a) to protect and preserve the environment within the limits of their national jurisdiction; and
- b) to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond national jurisdiction.

5. Co-operation

States and other stakeholders shall co-operate on the basis of equity and reciprocity to conserve, manage and restore or rehabilitate biological and cultural diversity in TBPAs. They should ensure that utilisation of natural resources is sustainable and that benefits are shared equitably, taking into account the rights, interests and respective capacities of local communities, indigenous peoples and other stakeholders.

6. Prevention

Protection of the environment is best achieved by preventing environmental harm rather than by attempting to remedy or compensate for such harm. Programmes, policies and activities in and around TBPAs should be planned and conducted so as to prevent or minimise such harm.

7. Precaution

In decision-making affecting TBPAs and their immediate surroundings, lack of scientific certainty shall not be used as a reason to postpone action to avoid potentially serious or irreversible harm to the TBPA.

8. *Transboundary environmental effects*

Where a proposed activity may generate transboundary environmental harm, especially to a protected area, an environmental and, where appropriate, social impact assessment shall be undertaken. There should be prior and timely notification to potentially affected States and consultation should be carried out in good faith with such States and with potentially affected persons.

Potentially affected persons in other States shall be granted access to and due process in administrative and judicial proceedings, without discrimination on the basis of residence or nationality.

9. *Military and hostile activities*

States with legal authority over a protected area should not use it for strategic or military purposes. Military and hostile activities damaging to TBPAs shall be avoided. Consideration should be given to formally demilitarising TBPAs.

Part III. Establishment and management of TBPAs

10. *Basic legal and institutional framework*

Each State should establish or, where necessary, strengthen its legal and institutional framework for the creation and effective management of a representative system of protected areas. Such a system should specifically provide for:

- a) the conservation of areas containing major ecosystems, endangered habitat types, high biodiversity and high endemism, through a range of protected area management categories providing for different conservation objectives;
- b) the linking of protected areas via natural habitat corridors into bioregional networks to encourage natural animal movements, the connection of populations and gene pools and rational conservation and management of biodiversity;
- c) the establishment of buffer zones around protected areas to promote environmentally sound and sustainable development, including wildlife-based forms of land-use and low-impact tourism; and
- d) the incorporation of measures to safeguard the integrity of protected areas into regional land-use planning and sectoral programmes and policies.

11. *Establishment of TBPAs*

1. Special consideration should be given to establishing contiguous protected areas to promote environmental protection, peace and development in the following situations:
 - a) where a natural system or water catchment straddles one or more boundaries and, consistently with the ecosystem approach, should be managed as a single ecological unit to maintain essential ecological processes and life-support systems;

- b) where local communities and indigenous peoples in natural areas are linked across boundaries by shared ethnic or socio-cultural characteristics, traditions and practices;
 - c) where the management or use of shared natural resources is or may become a locus of contention;
 - d) where a boundary dispute involves unresolved claims to land or marine areas; or
 - e) to rebuild confidence and security for local communities and indigenous peoples and provide a stable foundation for conservation and sustainable development after a period of armed conflict.
2. Where a State or other stakeholder wishes to establish or enlarge a protected area contiguous to a boundary, all parties concerned should co-operate in examining the possibility of establishing a corresponding protected area or appropriate conservation measures on the other side of the boundary. Where appropriate, the States concerned should consider proposing such areas for joint designation under relevant multilateral environmental instruments.
 3. The public, including affected local communities and indigenous peoples, non-governmental organisations, women's organisations and other stakeholders, shall be consulted as part of a transparent and participatory process before any decision is taken to establish or enlarge a protected area contiguous to a boundary. Where practicable, issues related to land tenure and rights of access to and use of natural resources in the TBPA shall be taken into consideration during this consultation process.
 4. Where appropriate, States or other stakeholders may call on the good offices of a neutral third party to facilitate consultation over the establishment of contiguous protected areas as well as the development of harmonised policies and management plans for the area.

12. Legal basis for co-operative management of TBPAs

1. States should use their best endeavours to remove legal and institutional obstacles to co-operation, harmonise relevant legal measures and establish a positive framework for co-operative management of the TBPA concerned.
2. Appropriate frameworks will vary for each TBPA. They may be strengthened over time to reflect changes in circumstances, capacity and political and public awareness. The range of options includes:
 - a) formal agreements between neighbouring States to consult and co-operate with each other, ranging from a bilateral treaty to a joint declaration, memorandum of agreement or letter of intention;
 - b) delegation by each State of powers to a designated authority to coordinate the management of the protected area with that of the contiguous protected area, to implement agreed conservation and management objectives and to enter into further agreements for this purpose;
 - c) administrative agreements between counterpart environment, resource management and/or planning agencies, such as memoranda of understanding or co-operation;

- d) creation of a single management authority for the TBPA;
 - e) customary or vernacular resource management agreements that provide a basis for establishing collaborative management processes with indigenous peoples, local communities and local governing bodies;
 - f) contractual agreements between relevant stakeholders, including private sector interests and non-governmental organisations; and
 - g) the designation of focal points or programme coordinators for the TBPA as a whole, or for each of its constituent parts.
3. States and other stakeholders shall carry out exchange of information, notification, timely consultation and other forms of co-operation regarding the TBPA in the spirit of good neighbourliness.

13. *Harmonised or joint management planning*

1. Competent authorities and other stakeholders with rights and interests in the TBPA should co-operate to develop compatible strategies for long-term conservation and management of the area concerned. They should take account of sustainable traditional practices, different levels of institutional and technical capacities and the need for mutual assistance and support in implementing agreed management objectives.
2. Harmonised, coordinated or joint management planning and programmes should be developed for the specific purposes outlined below:
 - a) capacity building;
 - b) wildlife management, including population control where appropriate;
 - c) ecological monitoring;
 - d) promotion of regional opportunities for low-impact tourism. Where possible, this should include the lifting or relaxation of border controls for visitor movements within the TBPA;
 - e) planning of appropriate infrastructure for visitor access and other compatible human activities;
 - f) strategic environmental assessment, environmental impact assessment and risk assessment procedures;
 - g) public information, community awareness, education and research;
 - h) co-operative law enforcement, involving members of local communities where appropriate; and
 - i) financial planning and fundraising including, where appropriate, measures for the equitable apportionment of revenues generated by constituent parts of the TBPA.
3. Effective management of the TBPA should be based on constructive relationships with:
 - a) national, sub-national and local authorities;
 - b) sectoral authorities (especially those with jurisdiction over environment, natural resource management, tourism, water resources, planning, mining, foreign affairs, customs and immigration, defence, maritime affairs and coastguard services);

- c) the private sector (especially companies and individuals that carry out activities that may affect implementation of the protected area management plan);
- d) local and, where applicable, national non-governmental organisations;
- e) inter-governmental organisations (including, where applicable, the institutions established under multilateral environmental agreements, including the regional seas conventions); and
- f) the media.

14. Environmental impact assessment

Strategic, environmental and, where appropriate, social impact assessments shall be conducted, in accordance with international best practice, for programmes, policies and activities which may have adverse impacts on TBPAs, taking into account their scope, duration, intensity and potential cumulative impacts when combined with other activities.

15. Emergency planning for TBPAs

1. In order to safeguard TBPAs in emergency situations, including natural disasters, States and other stakeholders should co-operate to establish emergency prediction and information procedures and to plan coordinated responses.
2. Where appropriate, joint emergency response procedures should be developed with regard to armed conflict in or around TBPAs.

16. Defence planning and military activities in times of peace

1. All armed forces should adopt and publish appropriate environmental guidelines, especially applicable to rules of engagement. Potential adversaries should be invited to conform to reciprocal humanitarian and environmental constraints.
2. In furtherance of the Draft Code, armed forces and other interested parties shall be informed of the location of, and rules or guidelines applicable to, TBPAs. These rules and guidelines should be incorporated into relevant military manuals.
3. States and other stakeholders should not locate military personnel, installations and equipment in or near to TBPAs where this could generate environmental harm to such areas. The testing or use of weapons, including landmines, should be prohibited in TBPAs.
4. Contiguous states may co-operate to designate high-priority protected areas as non-defended localities or demilitarised zones under Articles 59 and 60 of Additional Protocol I to the Geneva Convention of 12 August 1949 (see Annex to Draft Code). Areas designated for this purpose should be completely demilitarised and permitted activities should be limited to those compatible with the management plan. Provision should be made for enhanced protection, monitoring, early warning and reporting mechanisms where the natural and/or cultural values of the area are under threat. High-priority protected areas may in particular include:
 - a) sites designated as World Heritage sites under the 1972 Convention for the Protection of the World Cultural and Natural Heritage and sites designated for

protection under the 1954 Convention on the Protection of Cultural Property in the Event of Armed Conflict;

- b) transboundary sites of international importance that are wholly or partly included in the Ramsar List of Wetlands of International Importance, the World Network of Biosphere Reserves or regional lists or networks of specially protected areas.

17. *Establishment of offences concerning TBPA*

States should take all measures necessary to establish jurisdiction, create offences relating to damage to TBPA during armed conflict and empower designated institutions to prosecute alleged offenders and take enforcement action. Such offences may include:

- a) making TBPA and the natural resources within them the object of attack;
- b) using the TBPA or its immediate surroundings in support of military action;
- c) causing significant, widespread, or long-term environmental damage to a TBPA.

Part IV. TBPA in times of armed conflict

18. *General obligations*

All armed forces, whether regular or irregular, should continue to observe the principles and rules of international environmental and humanitarian law to which the parties to the conflict are bound in times of peace. Natural and cultural resources shall not be pillaged under any circumstances.

19. *Rules specific to TBPA*

1. Parties to the armed conflict shall not take action to turn the TBPA into a military objective or use it for any strategic advantage.
2. The parties shall take all practicable steps to protect the TBPA from attack and, if attacked, to minimise any damage to the area.
3. The parties shall take all feasible precautions in their choice of means and methods of attack with a view to avoiding or minimising incidental damage to TBPA.
4. If a party to the armed conflict moves military installations, equipment or personnel into the TBPA, or otherwise takes action that converts the TBPA into a military objective, the TBPA may lose its immunity from attack while it remains a military objective. However, any military response measures shall:
 - a) be decided upon only by the highest operational level of command
 - i) on the basis of exercising the legitimate right of self-defence,
 - ii) only if the attack is the sole militarily feasible option,
 - iii) taking all feasible precautions in the choice of means and methods of attack, with a view to avoiding or minimising direct and incidental damage to the area, and
 - iv) only after advance warning is issued to opposing forces allowing reasonable time for those forces to redress the situation;

- b) be proportionate to the military objectives involved, with a view to minimising direct and incidental damage to the TBPA; and
 - c) be cancelled or suspended if it becomes apparent that the damage to the TBPA will be excessive or disproportionate.
5. If a single armed force occupies the TBPA, those with authority for that force shall comply with the objectives and rules applicable to the TBPA.

20. Steps towards negotiation and resolution

1. If armed conflict or other complex emergency situations develop that are outside the control of the protected area authorities, these authorities or other stakeholders should immediately appeal to all parties to the conflict to respect the integrity of the protected area and to abide by the environmental and humanitarian principles of this Draft Code. This appeal may be public or private, as appropriate. It shall be clearly neutral in character and have no intent to give strategic advantage to any party to the armed conflict. Liaison, where appropriate, may be carried out by a neutral third party, such as the International Committee of the Red Cross or IUCN – The World Conservation Union.
2. States or other stakeholders may urgently seek the good offices of the Secretary General of the United Nations, UNESCO, the President of the International Committee of the Red Cross, IUCN, regional economic integration organisations, non-governmental organisations or other bodies for help in negotiating an end to the conflict or complex emergency situation and obtaining humanitarian and other assistance.
3. Where an armed conflict threatens internationally-protected habitats or populations of species, possibly through increased poaching and illegal wildlife trade, States or other stakeholders should urgently notify the relevant treaty secretariats to promote the adoption of available sanctions or recommendations by Parties to the instruments concerned.

21. Displaced people and refugees

Where a TBPA or its immediate surroundings becomes a refuge for displaced people or refugees, the protected area authority, other competent authorities and outside agencies shall co-operate closely to minimise adverse impacts on the area concerned in accordance with the UNHCR Guidelines on Prevention of Environmental Impacts Related to Refugees Operations (UNHCR, 1996).

Part V. TBPAs after armed conflict

22. Identification and assessment of damage

States and other stakeholders should co-operate to identify and assess damage inflicted on the natural and cultural environment of a TBPA as a result of activities associated with armed conflict, as well as sources of disturbance that continue to threaten the area.

23. Restoration and rehabilitation

1. Plans should be developed by local, regional/provincial and national government agencies in close consultation with affected local communities, indigenous peoples and other stakeholders to restore and rehabilitate the natural and cultural integrity of the TBPA.
2. Priority for environmental restoration should be given to habitats of rare, threatened and endemic species, to critical native vegetation communities and to fragmented natural areas and corridors. Measures should be taken to remove or contain continuing sources of disturbance to the TBPA. All emplaced land mines and other explosive remnants of war should be located and rendered harmless.
3. Relief and development funding should be directed according to the priorities agreed during the restoration and rehabilitation planning process.
4. To maintain donor confidence, it may be beneficial to establish emergency trust or out-of-country funds until long-term peace is assured.

24. Post-conflict policy changes

Post-conflict policy changes should be subject to impact assessment, and subsequently monitored, where they may adversely affect a TBPA. Key programmes and projects for prior assessment may include the establishment of refugee, agriculture and livestock resettlement areas and the authorisation of new infrastructure or industrial and extractive operations in or near to the area concerned.

25. Enforcement measures

1. States shall take all necessary measures, where appropriate in co-operation with other States and/or relevant international bodies, to prosecute those alleged to have committed offences relating to TBPA.
2. Where appropriate, States shall co-operate to facilitate the extradition of those persons charged with offences relating to implementation of this Draft Code.
3. Consideration should be given to seeking compensation and reparation to promote the restoration and rehabilitation of the TBPA concerned.

Part VI. Measures to promote and enhance compliance

26. Compliance and dispute avoidance

States and other actors involved in managing TBPA shall co-operate to ensure compliance with this Draft Code and to avoid disputes. Procedures and mechanisms to enhance compliance should be simple, transparent and non-confrontational and may include joint or impartial third-party fact-finding missions and the provision, to the extent possible, of technical and financial assistance.

27. Peaceful approaches to settlement of disputes

If a dispute over the interpretation and application of this Draft Code does arise, States and other actors should seek resolution through peaceful means, such as:

- a) negotiation and enquiry;
- b) mediation and conciliation, where appropriate through the good offices of neutral countries, regional agencies or arrangements, or appropriate organisations;
- c) arbitration or judicial settlement.

28. Relationship between the Draft Code and international conventions

The provisions of this Draft Code should be read consistently with the rights and obligations established under existing international agreements, except where the exercise of such rights and obligations would seriously threaten a TBPA. Parties shall implement this Draft Code with regard to the marine environment consistently with the rights and obligations under the 1982 United Nations Convention on the Law of the Sea.

29. Financial support

To maximise the potential benefits of transboundary conservation, States, inter- governmental agencies, non-governmental organisations, public and private bodies and individuals are encouraged to provide technical assistance and financial or other support at the request of the States or protected area authorities concerned.

30. Monitoring and revising the Draft Code

The Draft Code is a dynamic instrument that may need to be updated at intervals to take account of legal, ethical, socio-economic and technical developments and constraints and to ensure that it is both relevant and effective. It should be considered for review, by appropriate bodies and States that have endorsed the Draft Code, at intervals of five years or less where considered necessary.

Annex to the Draft Code

Components of the international legal regime on environmental and humanitarian issues

- a) *Instruments for conservation, sustainable use and restoration of biological diversity and ecosystem services across boundaries*
 - Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 1971);
 - Convention for the Protection of the World Cultural and Natural Heritage (Paris, 1972);
 - Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973);

- Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979);
- Convention on the Law of the Sea (Montego Bay, 1982);
- World Charter for Nature (New York, 1982);
- Convention on Biological Diversity (Rio de Janeiro, 1992);
- United Nations Framework Convention on Climate Change (Rio de Janeiro, 1992);
- Rio Declaration on Environment and Development (Rio de Janeiro, 1992);
- United Nations Convention to Combat Desertification (Paris, 1994);
- Convention on the Law of the Non-Navigational Uses of International Watercourses (New York, 1997), as well as relevant regional and bilateral conservation instruments and relevant protocols to certain regional seas conventions.

b) Instruments concerning respect for human rights

- Universal Declaration of Human Rights (New York, 1948);
- Convention on the Prevention and Punishment of the Crime of Genocide (New York, 1948);
- Convention Relating to the Status of Refugees (Geneva, 1951) and its Protocol Relating to the Status of Refugees (New York, 1967);
- International Convention on the Elimination of All Forms of Racial Discrimination (New York, 1965);
- International Covenant on Civil and Political Rights (New York, 1966);
- International Covenant on Economic, Social and Cultural Rights (New York, 1966);
- Convention on the Elimination of All Forms of Discrimination against Women (New York, 1979);
- Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (New York, 1984);
- ILO Convention concerning Indigenous and Tribal Peoples in Independent Countries (Geneva, 1989);
- Convention on the Rights of the Child (New York, 1990).

c) Instruments prohibiting environmentally damaging methods or means of warfare and/or mandating protection of the natural or cultural environment against avoidable harm in areas of armed conflict

- Convention on the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 1954);
- Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations (New York, 1970);

- Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (New York, 1976), Protocols I and II Additional to the Geneva Convention of 12 August 1949 respectively relating to the Protection of Victims of International Armed Conflicts (Berne, 1977);
- Protection of Victims of Non-International Armed Conflicts (Berne, 1977);
- Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (New York, 1981);
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (New York, 1993);
- Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (Ottawa, 1997);
- Statute of the International Criminal Court (New York, 1995);
- The customary law of war and the IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas.

Appendix 1

Global list of complexes of internationally adjoining protected areas

Dorothy Zbicz (2001)

Introduction

In 1997, the first comprehensive “List of Transfrontier Protected Area Complexes” was compiled for the IUCN/WCPA Parks for Peace Conference held in Somerset West, South Africa (Zbicz and Green, 1997). Since then, interest in this topic has increased significantly, and many new examples of transboundary co-operation have been identified. For these reasons, the original list has been updated and revised. There are currently 169 complexes of internationally adjoining protected areas containing 666 individual protected areas in 113 countries. This list provides a glimpse of the expanding potential for transboundary conservation and Parks for Peace.

The list and the update

The 1997 list was based on an earlier preliminary compilation of TBPAs . It was adapted and added to through interviews and correspondence with protected area professionals and researchers around the world. The new list was then verified at the UNEP-WCMC. To provide consistency, two criteria were used for inclusion of sites on the list of adjoining protected areas:

- Sites had to adjoin across one or more international boundaries; and
- Sites had to qualify as protected areas, based on the IUCN definition and be assigned an IUCN management category (I–VI).

The latter criterion meant that sites had to be both legally recognized by governments (though not necessarily managed by them) and maintained within the UNEP-WCMC database. For various reasons, several sites referred to as “protected areas” did not meet this requirement and were therefore excluded. From these excluded sites, a second list of “potential TBPA complexes” was created, which included 69 sites with an established protected area on one side of an international boundary and a proposed protected area, or one without an IUCN category, on the other side.

The present update (see table below) was completed in a similar fashion, with some additional input. The original list had been compiled as part of a research project examining transboundary co-operation between adjoining protected areas. The data were collected via an international survey mailed to the managers of all these protected areas. Of 317 surveys sent, 214 individual responses were received, which included 91% of all the complexes (Zbicz , 1999a). Not only did these completed surveys contain

a wealth of information about transboundary co-operation, but they also provided information important for updating and adding to the list. Information from conversations, publications, and conferences collected since 1997 was also included. The updated list was once again verified using the UNEP-WCMC database, and revised regional maps were then prepared by UNEP-WCMC (see Appendix 2).

Increase in complexes of internationally adjoining protected areas

Since the earlier survey, the number of complexes of internationally adjoining protected areas has increased dramatically. While some of this may be attributable to UNEP-WCMC having received more current information from countries in preparing the 2000 United Nations List of Protected Areas, even more is due to the establishment of new protected areas. In the four years since the earlier list was compiled, 178 more protected areas have become part of such complexes. 29 of the complexes which, in 1997, were on the list of *potential* complexes of this kind (see above), have now – with the formal establishment of new protected areas in the four years since – met the criteria for listing. At least as many new sites have been added to the list of potential complexes, indicating that there will be continued growth in numbers for several years to come.

Table 1. Regional distribution of complexes of internationally adjoining protected areas

	1988 Complexes	1997 Complexes	1997 PAs	2001 Complexes	2001 PAs	Complexes involving 3 countries
North America	5	8	42	10	48	0
Central and South America	7	25	93	29	121	6
Europe	20	44	154	64	239	8
Africa	20	33	123	36	150	12
Asia	7	26	76	30	108	5
Total	59	136	488	169	666	31

Adjoining protected areas and transboundary conservation

It is important to note that the 2001 list, like that of 1997, includes a number of situations where protected areas in neighbouring countries adjoin each other but no co-operation of any kind occurs between them. These would not be properly recognised as TBPAs under the definition in Box 1.1, but are nonetheless included in the list and statistics for completeness. It should also be noted that the list is of complexes which straddle national boundaries, and it therefore excludes other areas within countries which would meet the definition of a TBPA.

In fact, some level of co-operation already occurs in 82% of the complexes listed, although most of this is at the lowest levels of communicating and sharing information (Zbicz, 1996b).

The list, therefore, not only identifies where protected areas occur on either side of national boundary, but also the potential for greater co-operation in future, including for the establishment of more Parks for Peace. This can be realised through formalizing transboundary relationships for conservation and security as recommended in these guidelines. The potential for improved biodiversity conservation and regional collaboration in the 21st century may indeed extend further: to identify this potential, a list of *all* protected areas adjacent to international boundaries is under preparation.

All proposed amendments to the list below should be sent to:

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Countries	Transboundary ¹ Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
North America				
Canada (NW Terr.)/		13396	Ellesmere Island National Park Reserve/	II
Greenland (Denmark)		650	NE Greenland National Park NE Greenland Biosphere Reserve, Ramsar Site	II BR, RS
Canada/		19306	Roosevelt International Nature Park/	V
US			Campobello National Monument	V
Canada/		612 18707 7406	Kluane National Park and Preserve Kluane Wildlife Sanctuary Tatshenshini-Alsek Wilderness Park/	II IV II, WH
US		13038 1005 35387 22490 1010 22485 35382	Tongass National Forest Wrangell-St Elias National Park Wrangell-St Elias Wilderness Area Wrangell-St Elias National Preserve Glacier Bay National Park Glacier Bay National Preserve Glacier Bay Wilderness Area	IV II, WH Ib V II V Ib
Canada/	Waterton/Glacier International Peace Park (1932)	626	Waterton Lakes National Park, Biosphere Reserve	II, BR
		21193 300039	Akamina Kishinena Provincial Park Flathead Provincial Forest Reserve/	II
US		973 100967	Glacier National Park Flathead National Forest	II VI
Canada/		100672 100673 101594	Ivvavik National Park Vuntut National Park Old Crow Flats Special Management Area/	II II Ib
US		2904	Arctic National Wildlife Refuge	IV

¹ Note: Many other complexes in this list can be considered as TBPAs, but these have a specific and recognised name.

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Canada/ US		66395 300040 21322 100955 988	Quetico Wilderness Provincial Park Naguagou Lake Indigenous Reserve/ Boundary Waters Canoe Area Wilderness Area Superior National Forest Voyageurs National Park	II 1b VI II
Canada/ US		4185 18646 101678 65159 979 21389	Cathedral Provincial Park E. C. Manning Provincial Park Skagit Valley Recreation Area Cultus Lake Provincial Park/ N. Cascades National Park Pasayten Wilderness National Forest	II II II II II Ib
Mexico/ US		101431 101457 976	Maderas del Carmen Protection Area (Sierra de) Cañón de Santa Elena Fauna and Flora Protection Area/ Big Bend National Park	VI VI II
Mexico/ US		34862 100881	Sierra de los Ajos Buenos Aires y Purica Natural Resources Protection Area/ Coronado National Forest	VI VI
Mexico/ US	Sonoran Desert Biosphere Reserve Network (1997)	32971 18091 101409 13771 35472 35977 1020	El Pinacate y Gran Desierto de Altar National Biological Reserve Sierra del Pinacate Refugio Alto Golfo de California y Delta del Río Colorado National Biological Reserve/ Cabeza Prieta National Wildlife Refuge Cabeza Prieta Wilderness Area Organ Pipe Cactus Wilderness Area, Biosphere Reserve Organ Pipe Cactus National Monument Tohono O'odham Reservation	VI IV VI, BR IV Ib Ib, BR III
Central and South America				
Belize/ Guatemala		20230 3306 3314 116297 28850 30614	Chiquibul National Park Chiquibul Forest Reserve Columbia River Forest Reserve Vaca Forest Reserve Maya Mountains Forest Reserve/ Río Chiquibul-Montañas Mayas Biosphere Reserve (National)	II VI VI VI VI VI VI
Belize/ Guatemala/ Mexico		20224 61957 20227 26621 30604 102817 19570	Rio Bravo Conservation Area Private Reserve Aguas Turbia National Park Society Hall Nature Reserve/ Maya Biosphere Reserve El Mirador - Río Azul National Park Naachtún - Dos Lagunas Protected Biotope/ Calakmul Biological Reserve	IV II Ia BR Ia II VI

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Costa Rica/ Nicaragua Costa Rica/ Nicaragua	San Juan River Basin (Si-a-Paz)	12488 102338 30630 167 30599 12493 30628 20220	Si-a-Paz Caño Negro National Wildlife Refuge Las Camillias National Wildlife Refuge/ Los Guatuzos Wildlife Refuge Tortuguero National Park Tortuguero Protective Zone Barro del Colorado National Wildlife Reserve Corridor (Proposed)/ Río Indio-Maíz Biological Reserve San Juan Delta Biological Reserve	RS IV IV IV II VI IV Ia
Colombia/ Panama		142 99642 236 102255	Los Katios National Park Serranía de Bagre Biological Corridor/ Darién National Park Punta Patiño Private Nature Reserve	II II
Costa Rica/ Panamá	Parque Internacional La Amistad	2553 10903 19372 163 9636 156 3315 12491 2552 17185 102253 240	Internacional La Amistad Talamanca Range-La Amistad Reserves, which includes: Barbilla National Park, Chirripó National Park, Tapantí National Park, Hitoy Cerere Biological Reserve, Río Macho Forest Reserve, and Las Tablas Protective Zone/ La Amistad National Park Palo Seco Protected Forest Lagunas de Volcán Wildlife Refuge Volcán Barú (Chiriquí) National Park	II, BR WH II II VI II VI IV II
Costa Rica/ Panama		19402 16787	Gandoca y Manzanillo National Wildlife Refuge/ Isla Bastimentos Marine National Park	IV II
El Salvador/ Guatemala/ Honduras	Montecristo Trifinio (1991)	9638 102815 18804	Montecristo National Park/ Fraternidad o Trifinio National Biosphere Reserve/ Montecristo Trifinio National Park	IV VI II
El Salvador/ Honduras/ Nicaragua		 40996 12652	Proposed/ Río Negro Biological Reserve/ Estero Real Nature Reserve	Pr IV II
Guatemala/ Mexico		30605 14305 67671	Sierra de Lacandón National Park/ Montes Azules (Selva Lacondona) Biosphere Reserve (National) Bonampak National Monument	Ia VI III

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Honduras/		201	Río Plátano Biosphere Reserve and World Heritage Site	BR, WH
		41014	Río Plátano National Park	Pr
		41045	Tawahika Anthropological Reserve	
		41013	Patuca National Park	Pr
		41034	Río Coco Natural Monument/	Pr
Nicaragua		12650	Bosawas Biosphere Reserve (National)	VI
Argentina (Jujuy)/		16894	Laguna de los Pozuelos Biosphere Reserve (National)	VI, BR
		3	Laguna de los Pozuelos Natural Monument /	III
Bolivia		20035	Altamachi Vicuña Reserve	IV
Argentina (Salta)/		11	Baritú National Park/	II
Bolivia		20041	Tariquíá National Reserve Corridor (Nature Conservancy)	IV Pr
Argentina (Misiones)/	Diagonal Verde (Yaboti)	21212	Moconá Provincial Park	II
		32723	Guaraní Forest Reserve	VI
		145502	Yaboti Biosphere Reserve/	BR
Brazil (Rio Grande do Sul)		16086	Do Turvo State Park Mata Atlânti Biosphere Reserve	II BR
Argentina (Misiones)/		15	Iguazú National Park	II
		4332	Iguazú National Reserve	VI
		61817	Iguazú Strict Nature Reserve/	Ia
Brazil (Paraná)/		60	Iguaçu National Park/	II
Paraguay		30045	Moisés Bertoni Natural Monument	III
Argentina (Río Negro and Neuquén)/		97490	Nahuel Huapi National Park (also 2497)	II
		97491	Nahuel Huapi National Reserve (also 61824)/	VI
Chile		90	Puyehue National Park	II
		88	Vincente Perez Rosales National Park	II
Argentina (Neuquén)/		7	Lanín National Park	II
		4330	Lanin National Reserve	VI
		30844	Complejo Islote Lobos	II
		16875	Chañy Forest Reserve/	VI
Chile		91	Villarrica National Park	II
		10706	Villarica National Reserve	IV
		9418	Huerquehue National Park	II
Argentina (Santa Cruz)/		61823	Los Glaciares National Park	II
		4329	Los Glaciares National Reserve/	VI
Chile		9414	Bernardo O'Higgins National Park	II
		89	Torres del Paine National Park	II
Argentina/		16873	Copahue-Caviahue Provincial Park/	II
Chile		111	Ñuble Reserva Nacional	IV

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Bolivia/		20049 31	Iténez Reserva Fiscal Noel Kempff Mercado National Park/	VI II
Brazil (Rondonia)		5126 41090 34028	Guaporé Biological Reserve Baixo Sao Miguel State Extractive Forest Pedras Negras State Extractive Forest	Ia VI VI
Bolivia/		36	Eduardo Avaroa National Reserve/	IV
Chile		94112 30043	Licancabur National Park Los Flamencos National Reserve	II IV
Bolivia/		33 20030 20035	Sajama National Park Sajama Integrated Management Area Altamachi Vicuña Reserve/	II IV
Chile		86 9435	Lauca National Park Las Vicuñas National Reserve	II IV
Bolivia/		98183 39	Madidi National Park Ulla Ulla National Reserve and Biosphere Reserve/	II IV, BR
Peru		127825	Bahuaja-Sonene National Park (incl. Pampas de Heath NS)	II
Brazil/		101760	Tucumaque Indigenous Reserve/	VI
Suriname		276	Sipaliwini Nature Reserve	IV
Brazil/	La Neblina (1997)	54	Pico da Neblina National Park/	II
Venezuela		4367	Serranía de la Neblina National Park	II
Colombia/		9400	La Paya Natural National Park/	II
Ecuador/		2499 186	Cuyabeño Faunal Production Reserve Panacocha Protected Forest Yasuni National Park and Biosphere Reserve/	VI II, BR
Peru		98245	Gueppí Reserve Zone	Un
Colombia/		144	Tamá Natural National Park/	II
Venezuela		322 101129 30640	El Tamá National Park Cerro Machado- El Silencio San Antonio- Ureña Protected Zone	II VI V
Colombia/		19993	Catatumbo-Bari Natural National Park/	II
Venezuela		318 20068	Perijá National Park Región Lago de Maracaibo -Sierra de Perijá Protected Zone	II V
Ecuador/	Cordillera del Condor (1998 Peace Accord)	7912	Podocarpus National Park (near, not adj)/	II
Peru		168280	Santiago - Comaina Reserved Zone (1999)	Un
Europe				

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Albania/ Greece/ Macedonia (Former Yugoslav Republic)	Prespa International Park (2000)	674 127792 67978 2516 1056 16437 20696	Prespa Lake National Park/ Prespes National Park Core Zone Prespes National Park Buffer Zone Lake Mikra Prespa Ramsar Site/ Galichica National Park Pelister National Park Ohridsko Ezero Natural Monument (Lake Ohrid) Prespansko Ezero Natural Monument	II IV RS II II III III
Austria/ Croatia/ Hungary/ Slovenia	Proposed Mura-Drava Biosphere Reserve	300155 300156 100798 101747	Unteres Murtal Nature Reserve Mur Protected Landscape Area/ Danube-Drava National Park (Duna-Drava)/ Murava/ Drava Landscape Park	 V V
Austria/ Czech Republic	Podyi/Thayatal Bilateral National Park (2000)	102736 103578 300283 30721 4280 4279	Thayatal Landscape Protection Area Thayatal Nature Reserve Thayatal National Park/ Podyji National Park Podyji Protected Landscape Area Palava Protected Landscape Area	V IV II V V
Austria/ Czech Republic		102882 5425 2558 2062	Lainsitz Niederung Strict Nature Reserve Blockheide Eibenstein Nature Park Blockheide Eibenstein Nature Reserve/ Trebonsko Protected Landscape Area Trebos Basin Biosphere Reserve Meandry Luznice Nature Reserve	RS V V V BR IV
Austria/ Czech Republic/ Germany		9412 4282 26059 20015 20517 142600 64659 667 3024	Böhmerwald Landscape Protected Area/ Šumava Protected Landscape Area Šumava National Park Sumava Biosphere Reserve Blansky les Protected Landscape Area Horní Luznice Nature Reserve/ Bayerischer Wald Nature Park Bayerischer Wald National Park Bayerischer Wald Biosphere Reserve	Un V II BR V IV V II BR
Austria/ Germany		31402 300284 688	Kalkhochalpen Nature Reserve Kalkhochalpen National Park (Holkkalkalpen)/ Berchtesgaden National Park	IV II
Austria/ Hungary	Lake Fertö (1991)	1218 62709 102857 9566	Neusiedlersee Nature Reserve Neusiedlersee - Seewinkel National Park Neusiedler See und Umgebung Protected Landscape Area/ Fertő Hanság National Park (Fertő -Tavi)	IV II V II

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Austria/		18769	Donau-Auen National Park	II
		31412	Donau-March-Thaya-Auen Landscape Protection Area	V
		68341	Auen Landscape Protection Area	V
		1220	Marchaven-Marchegg NSG Nature Reserve	Un
		31408	Untere Marchauen Nature Reserve/	IV
Slovakia		19034	Zahorie Protected Landscape Area	V
		12155	Male Karpaty Protected Landscape Area	V
Belarus/		1985	Belovezhskaya Pushcha National Park, Biosphere Reserve, World Heritage Site/	II, BR , WH
Poland		854	Bialowieski National Park	II BR, WH IV
		2008,2094	Bialowieza Biosphere Reserve, World Heritage	
		11403	Puszcza Bialowieska Nature Reserve	
Belarus/	West Polissya	93914	Vygonoschanskies Zakaznik/	IV
Poland/		300285	W. Polissya National Park (Polesie Lubelskie)	II
		11147	Poleski National Park (Polesie)	II
		11639	Poleski Landscape Park/	V
Ukraine		11580	Shatskiy National Park (Shatsk)	II
Belarus/			Chyrvony Bor Zakaznik (local)	IV
			Osveyskiy Zakaznik	IV
			Velikoe Boloto Zakaznik (local)	IV
			Ykhnovichskiy Zakaznik	IV
Russian Federation			Sebezshskiy National Park	II
Belarus/		1644	Prypyatskiy National Park (Pripiatsky)/	Ib
Ukraine		1749	Polesskiy Nature Reserve (Zapovednik) Prypiat-Stokhid Regional Landscape Park	Ia
Belgium/	Germano- Belgian International Park (1965)	30050	Scarpe Escaut Regional Nature Park/	V
France		300051	Plaines de L'Escaut Nature Park	V
Belgium/		18950	Hautes Fagnes Eifel Nature Park	V
		1221	Hautes Fagnes Nature Reserve/	IV
Germany		6971	Hohes Venn Nature Park (Nord-Eifel)	V
Belgium/		7183	Vallee de L'Attert Nature Park/	V
Luxembourg		28416	Haute-Sure Nature Park	V
Belgium/		5593	Kalmthout State Nature Reserve/	IV
Netherlands		85979	National Park de Zoom (Kalmthotstse Heide)	II

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Bosnia-Herzegovina/ Yugoslavia, (Serbia) (Montenegro)		1055 15596 2170 1051	Sutjeska National Park/ Tara National Park Tara River Basin Biosphere Reserve Durmitor National Park, World Heritage Site	II II BR II, WH
Bulgaria/ Greece Croatia/ Hungary	Rhodope Mountains	602 6483 15605 15602 9683 100798	Pirin National Park and World Heritage Site (includes Bauvi Douпки NR and Malka Djinjiritsa NR)/ To Partheno Dasos Kentrikis Rodopis Natural Monument Central Rodopi Virgin Forest Kopacki Rit Special Reserve Kopacki Rit Nature Park/ Mohacsi Tortenelmi Emlekhely Nature Conservation Area Duna-Drava National Park	II, WH BR Ib Ia V IV V
Czech Republic/ Germany	Bohemian-Saxonian Switzerland	4275 32666 11800	Bohemian Switzerland National Park (České Švýcarsko) Labské Pískovce (Elbe Sandstones) Protected Landscape Area / Sächsische Schweiz National Park Sächsische Schweiz Protected Landscape Area	 V V V
Czech Republic/ Germany		61421 20920	Luzické Hory Protected Landscape Area (Lausitanian Mtns) Zittauer Gebirge Landscape Protection Area	V V
Czech Republic/ Poland		30722 4278 106889 11148	Protected Landscape Area Broumovsko Protected Landscape Area Orlické Hory/ Gór Stołowych National Park (Góry Stołowe) Stołowogorski Landscape Park (Górz Stołowych)	V V II V
Czech Republic/ Poland		645 852	Krkonoše National Park Jizerski Hory Protected Landscape Area (Jizera-Iser River)/ Karkonoski National Park	V V II
Czech Republic/ Poland/ Slovakia		4267 12270 11812	Beskydy Protected Landscape Area/ Zywiecki Park Krajobrazowy/ Protected Landscape Area Kysuce	V V V
Czech Republic/ Slovakia	White Carpathians	12154 12159	Protected Landscape Area White Carpathians/ Biele Karpaty Protected Landscape Area	V V

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Denmark/	Waddensea International Protected Region	92491	Waddensea Nature Reserve	IV V IV
		5762	Vadehavet Wildlife Reserve	
		17703	Vadehavet Conservation Area	
		64575	Vadehavet National Nature Area/	
Germany/		33391	Hosteinische Schweiz Nature Park	V
		32669	Schleswig-Holsteinisches Wattenmeer National Park	IV,V
		11837	Niedersächsisches Wattenmeer National Park	V
			Wattenmeer Biosphere Reserve	BR
		30116	Dollart Nature Reserve	IV
		82256	Nordfriesisches Wattenmeer Nature Reserve	IV
		20722	Hamburgisches Wattenmeer National Park/	V
Netherlands		64617	Dollard Nature Reserve	III
		12754	Waddensea Area Biosphere Reserve	BR
		12754	Waddenzee State Nature Reserve	RS
Estonia/		1649	Nigula Nature Reserve (Nigulaskiy State Reserve)/	IV, RS
Latvia		37102	Northern Vidzeme Regional Nature Protection Complex	V
Finland/		654	Lemmenjoki National Park (includes Pyörisjärvi, Pulju, Hammastunturi Wilderness Areas) /	II
Norway		822	Ovre Annarjokka National Park	II
Finland/		64508	Käsivarsi Wilderness Area/	Ib II
Norway		12297	Reisa National Park	V
		31256	Raisdoutterhaldi Protected Landscape Area	Pr.
			Guoatteloubbal National Park	
Finland/	Pasvik Nature Reserve (1993)	64504	Vätsäri Wilderness Area/	VI
Norway/		832	Øvre Pasvik National Park	II
		64472	Pasvik Nature Reserve/	Ia, RS
Russian Federation		62446	Pasvik Zapovednik (Proposed NP)	Ia, RS
Finland/		656	Oulanka National Park	II
		7486	Sukerijärvi Strict Nature Reserve/	Ia
Russian Federation		68351	Paanajärvi National Park (Paanayarvi) Sieppiuntury Regional Park (Pr)	II Pr.
Finland/		7500	Itäinen Suomenlahti National Park (Gulf of Finland)/	II
Russian Federation		62153	Kurgalskiy Zakaznik (Finnish Gulf Strict Nature Reserve)	IV
Finland/	Lapland (1990)	2561	Urho Kekkonen National Park/	IV
Russian Federation		1700	Laplandskiy Zapovednik	Ia

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Finland/ 				

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Germany/ Poland	Lower Oder (1992)	102224 300289	Unteres Odertal National Park/ Unteres Odertal International Park)/	V Pr
		31623 106899	Krawedz Doliny Odry Protected Landscape Area Doliny Dolnej Odry Landscape Park (Krajobrazowego)	V
Germany/ Poland		20793 855	Insel Usedom Landscape Protection Area (Proposed NP)/ Wolinski National Park	V II
Hungary/ Slovakia		13652 4377 4376	Aggtelék National Park/ Slovenský Kras National Park Slovenský Kras Protected Landscape Area	II II V, BR
Hungary/ Slovakia		30853 680 14146	Karancs-Madves Protected Area Bükki National Park/ Protected Landscape Area Cerová Vrchovina	V II V
Hungary/ Yugoslavia (Serbia)		681 145253	Kiskunsági National Park/ Selevenjske Pustare Nature Reserve	II, BR IV
Italy/ Slovenia		15346 32714 2517	Foresta Di Tarvisio Regional Provincial Nature Reserve Alpi Giulie Regional- Provincial Nature Park/ Triglavski National Park (Triglav)	Un V II
Italy/ Switzerland		717 915	Stelvio National Park/ Suisse National Park	V Ia
Lithuania/ Russian Federation		31552 68348	Kursiu Nerija National Park/ Kurshskaja Kosa National Park	II II
Macedonia (Former Yugoslav Republic)/ Yugoslavia (Serbia)		1050	Mavrovo National Park/ Shara Mountains National Park	II
Moldova/ Romania/ Ukraine	Danube Delta/Green Corridor of Europe	28791 31702 31703 4814 160873	Proposed/ Danube Delta Biosphere Reserve Rosca-Buhaiova National Reserve Letea Nature Reserve/ Dunaiskie Plavni State Zakaznik Dunaiskiy /Danube Delta National Biosphere Zapovednik	BR Ia Ia Ia Ia
Norway/ Sweden		829 905 906 3998 30818	Rago National Park Tysfjord Hellembotn National Park/ Padjelanta National Park Sarek National Park Stora Sjöfallet National Park Sjaunja Nature Reserve (also 6907)	II Pr II II V Ia

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Norway/ Sweden		826 9906 833 10401 30816	Femundsmarka National Park Femundsmarka Protected Landscape Area Gutulia National Park/ Rogen Nature Reserve Rogen-Langfjallet National Park Töfösingdalen National Park	II V II IV Pr II
Norway/ Sweden		125857 30821	Lunddsneset Nature Reserve/ Tresticklan National Park	Ia
Poland/ Slovakia		848 1975	Tatrzański National Park/ Tatranský National Park	II II
Poland/ Slovakia		106887 12160 14115	Babiogorski National Park/ Horná Orava CHKO Protected Landscape Area Babia Hora National Nature Reserve	II V Ia
Poland/ Slovakia		857 646	Pieninski National Park/ Pieninskiy National Park	II II
Poland/ Slovakia/ Ukraine	E. Carpathian Biosphere Reserve (1991)	851 62874 300290 11144 67746 67750 12157 148026 1990 1745 161620 161272	Bieszczadzski National Park Doliny Sanu Landscape Park Tsisniansky-Vetliny Landscape Park Magura National Park (Magurski) E. Carpathian –(E Beskeid) Biosphere Reserve/ E. Carpathians Biosphere Reserve Vychodne Karpaty Protected Landscape Area Poloniny National Park/ Karpatskiy National Biosphere Reserve, Zapovednik Karpatskiy National Park Stuzhytsia State Zakaznik Nadsan'ski Regional Landscape Park (Nadsionsky) Uzhanski Nature Park	II V V BR BR V II Ia, BR II IV V
Poland/ Ukraine		 15790	Raztochze National Park (Roztoczanski woj. przemyskiego) 4 Protected Landscape Areas/ Raztochye Zapovednik Raztochye Protected Landscape Area	II Ia
Portugal/ Spain		4724 4723 20936	RN da Ria Formosa Nature Park RN da Sapal de Castro Marim e Vila Real de Sto Antonio/ Marismas de Isla Cristina Nature Area	V IV V
Portugal/ Spain		860 71215	Peneda-Geres National Park/ Baixa-Lima-Serra do Xures Nature Park	II V

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Romania/ Yugoslavia (Serbia)		11150 2522	Cazanele Forest Reserve/ Djerdap National Park	IV V
Africa				
Angola/ Botswana/ Namibia/ Zambia	Okavango Delta	4493 600 7442 23072 30052 30051 1087 4081	Mucusso National Park Luiana Partial Reserve/ Chobe NP/ W. Caprivi Game Reserve Mahango Game Park Bwabwata National Park (W. Caprivi and Mahango merged) Mamili Nature Reserve Mudumu Nature Reserve/ Sioma Ngweze National Park West Zambezi Game Management Area	IV IV II IV II II II VI
Angola/ Namibia Benin/ Burkina Faso/ Togo		347 2251 885 883 597 2253 2254 3228 3226 9264 4488 2339	Iona National Park Mocamedes Partial Reserve (now Namibe NR) / Skeleton Coast Park Namib-Naukluft Park Boucle de la Pendjari National Park Pendjari Hunting Zone Atakora Hunting Zone/ Pama Partial Faunal Reserve Arly Total Faunal Reserve Arly Partial Faunal Reserve Kourtiagou Partial Faunal Reserve/ Kéran National Park (Kiran) Corridor to Pendjari	VI IV II II II VI VI IV IV IV IV II
Benin/ Burkina Faso/ Niger	“W” Park	12201 1048 4488 818	“W” du Benin National Park/ “W” du Burkina Faso National Park Kourtiagou Partial Faunal Reserve/ “W” du Niger National Park	II II IV II
Botswana/ Namibia/ South Africa	Kgalagadi Transfrontier Park (2000)	7508 97586 874	Gemsbok National Park/ Kalahari Private Reserve/ Kalahari Gemsbok National Park (Kgalagadi Transfrontier Park)	II II
Botswana/ South Africa/ Zimbabwe	Dongola/ Limpopo Valley	21174 20295 3059	Northern Tuli Game Reserve/ Vhembe-Dongola National Park (incl Venetia Limpopo NR) Limpopo Valley Wildlife Area/ Tuli Circle Safari Area	Pr IV VI VI

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Burundi/ Rwanda		9161 9148	Kibira National Park/ Nyungwe Forest Reserve	IV IV
Cameroon/ Central African Republic/ Republic of Congo	Sangha Park (2000)	31458 31459 72332	Lake Lobeke NP/ Dzanga-Ndoki National Park Dzanga Sangha Forest Special Reserve/ Nouabalé Ndoki National Park	II II VI II
Cameroon/ Chad/ Nigeria		609 5166 7861	Kalamaloué National Park/ Mandelia Faunal Reserve/ Chad Basin National Park	II IV II
Cameroon/ Nigeria		20058 20299	Korup National Park/ Cross River National Park	II II
Central African Republic/ Sudan Côte d'Ivoire/ Guinea/ Liberia		2261 5090 1295 29067 9176 20175	Yata-Ngaya Faunal Reserve/ Radom National Park Mont Nimba Strict Nature Reserve/ Mount Nimba Strict Nature Reserve/ E. Nimba National Forest W. Nimba National Forest	IV II Ia Ia Un Un
Dem. Republic of Congo/ Rwanda/ Uganda		1081 863 18436 18437	Virunga National Park (Eastern Sector)/ Volcans National Park/ Mgahinga Gorilla National Park Bwindi Impenetrable Forest National Park	II II II II
Dem. Republic of Congo/ Sudan		1083 20326 20325 20327 10737	Garamba National Park, World Heritage Site Mondo Missa Hunting Zone Azande Hunting Zone Gangala Hunting Zone (Gangala-na-Bodio)/ Lantoto Game Reserve (Pr. National Park)	II, WHS VI VI VI
Dem. Republic of Congo/ Uganda		1081 18438 1446 1443 1442 7934	Virunga National Park (Central Sector) / Queen Elizabeth National Park (was Rwenzori Mountains) Kyambura Game Reserve Kigezi Game Reserve Kibale Forest Corridor Game Reserve Kizinga Channel Animal Sanctuary	IV II, BR IV IV IV VI
The Gambia/ Senegal		2290 866	Niomi National Park/ Delta (Iles) du Saloum National Park	II II

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Guinea/ Senegal	Niokolo Koba-Badiar (1988)	29069 29409 865	Badiar National Park Badiar-Sud Classified Forest/ Niokola Koba National Park	II Un II
Kenya/ Somalia		2417 2591 3038 13715 872 13710 13714	Boni National Reserve Dodori National Reserve Kiunga Marine National Reserve (Kiunga Biosphere Reserve)/ Juba Controlled Hunting Area Lag Badana National Park Bushbush Game Reserve Bushbush Controlled Hunting Area	VI VI VI, BR Un Pr VI
Kenya/ Tanzania		1297 7437 916 918	Maasai Mara National Reserve/ Maswa Game Reserve Serengeti National Park Ngorongoro Crater Conservation Area	II IV II VI
Kenya/ Tanzania Kenya/ Tanzania	Kilimanjaro (1997)	19564 1402 758 7633 922 31593	Tsavo West National Park/ Mkomazi-Umba Game Reserve Amboseli National Park Loitokitok Forest Reserve/ Kilimanjaro National Park Kilimanjaro Game Reserve Kitenden Corridor	II IV II Un II IV
Kenya/ Uganda		760 9179	Mount Elgon National Park/ Sebei Controlled Hunting Area	II VI
Lesotho/ South Africa (Kwazulu Natal)	Drakensberg Mountains	7447 116328	Maloti – Sehlabathebe National Park/ Natal Drakensberg Park (incl. Cathedral Peak, Giant's Castle and other Game Reserves, and Garden Nature Reserve)	IV II
Malawi/ Zambia		779 1102	Nyika National Park/ Nyika National Park	II II
Malawi/ Zambia	Vwaza Marsh (1994)	4648 4102	Vwaza Marsh Wildlife Reserve/ Musalangu Game Management Area	IV VI
Malawi/ Zambia		780 1088 1086 1100 1091	Kasungu National Park/ N Luangwa National Park S Luangwa National Park Luambe National Park Lukusuzi National Park	II II II II II
Mauritania/ Senegal		9310 867 11653	Diawling National Park/ Djoudj National Park Gueumbeul Special Faunal Reserve	II II IV

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Mozambique/	Lubombo Transfrontier Conservation Area (2000)	4652 300292	Maputo Elephant Reserve Ponto do Ouro-Kosi Bay Marine Protected Area/	IV
South Africa (Kwazulu Natal)/		116329 39758 116275	Ndumu Game Reserve Tembe Elephant Park Reserve Greater St. Lucia Wetlands Park and World Heritage Site	II IV II, WHS
Swaziland		300293 7444 7451 300299 7445 300300 300301	Futi Corridor Reserve / Hlane National Park Mlawula Nature Reserve Ndzindza Nature Reserve Malolotja Nature Reserve Simunye Nature Reserve Mbuluzi Nature Reserve	VI VI IV IV IV IV VI
Mozambique/	Gaza/Kruger/ Gonarezhou Transfrontier Conservation Area (2003)	20295 800 799	Gaza National Park (was Limpopo Valley Wildlife Utilization Area – Coutada 16) Zinave National Park Banhine National Park/	VI II II
South Africa/		873	Kruger National Park/	II II
Zimbabwe		1104 30125	Gonarezhou National Park Lonestar Private Reserve Malapati Safari Area	VI VI
Namibia/		8785 300295	Ai-Ais Hot Springs Game Park Fish River Canyon/	II II
South Africa		30851	Richtersveld National Park	II
Rwanda/		862 300294	Akagera National Park (L'Akagera) Mutara Hunting Reserve/	II II
Tanzania/ Uganda		7884	Ibanda Game Reserve/	IV
Sudan/		904	Nimule National Park/	II
Uganda		31275 31276	Otze-Dufile Wildlife Sanctuary (also 7933) Mount Kei White Rhino Sanctuary	IV IV
Sudan/		1369	Kidepo Game Reserve/	VI
Uganda		958	Kidepo Valley National Park	II
Zambia/		7962	Lower Zambezi National Park/	II
Zimbabwe		2531 2524 2526 2525 2528	Mana Pools National Park Charara Safari Area Sapi Special Area Chewore Special Area Dande Special Area	II VI VI VI VI

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Zambia/	Victoria Falls	2347	Mosi-oa-Tunya National Park	III, WHS
		62183	Victoria Falls National Monument	III
		27103	Dambwa Forest Reserve/	Un
Zimbabwe		1993	Victoria Falls National Park	III
		2530	Zambezi National Park	II
		2529	Matetsi Safari Area	II
		1112	Kazuma Pan National Park	II
		1991	Hwange National Park (Wankie)	VI
Asia				
Armenia/		20679	Shikahogh State Reserve	Ia
Azerbaijan		94018	Lachin Protected Area (Lachinskiy Zakaznik)	IV
Bangladesh/		4478	Sundarbans W. Wildlife Sanctuary/	IV
India		9960	Sundarbans National Park	Ia
Bangladesh /		9280	Pabla khali Wildlife Sanctuary/	IV
India		1804	Dampa Wildlife Sanctuary (plus Proposed Corridor)	IV
Bhutan/		7996	Royal Manas National Park	II
		5066	Black Mountain National Park	II
			Protected Corridor/	
India		1818	Manas Sanctuary	IV
		9232	Buxa Tiger Sanctuary	IV
		62663	Buxa National Park	
Brunei Darussalam/		39641	Labi Hills Protection Forest Reserve	Ia
		18035	Labi Hills Forest Reserve (incl. Bukit Batu Patam; Bukit Teraja; Bukit Ulu Tutong Protected Forest Reserves)	Ia
		18035	Lugan Lulak Recreation Reserve (within Labi Hills FR)	V
		32948	Sungai Ingei Conservation Area (within Labi Hills FR)	Ia
		3937	Ensengi Forest Reserve/	Un
Malaysia		787	Gunung Mulu National Park and World Heritage Site	II, WH
		3790	Gading Forest Reserve	Un
		3939	Gunung Gading National Park	II
		3877	Medalam Protected Forest	Un
Cambodia/		68862	Virachey National Park/	II
Laos/		18872	Dong Ampham Nature Reserve	VI
		18896	Nam Kading National Biodiversity Conservation Area	VI
			Phou Kathong National Biodiversity Conservation Area/	Pr
Vietnam		12171	Chu Mom Ray – Ngoc Vin Nature Reserve	IV

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
Cambodia/ Thailand		12249 1422 1415	Preh Vihear Protected Landscape/ Yot Dom Wildlife Sanctuary (Yod Dom) Phanom Dong Rak Wildlife Sanctuary	V IV IV
China (Tibet) / India (Sikkim) / Nepal	Kanchenjunga	95784 143001	Extension of Qomolangma (Jiang Cun)/ Kangchenzonga National Park/ Kanchanjunga Conservation Area	Ib, Pr II
China/ N. Korea, (DPR)/ Russian Federation		95461 95460 96016 17908 1726	Jingpo Lake Nature Reserve (Jing Bo Hu) Mudan Peak Nature Reserve Changbaishan Nature Reserve and Biosphere Reserve Mt. Paekdu Natural Reserve (Baeku) Mt. Paekdu Natural Monument Kedrovaya Pad Zapovednik	II VI Ia, BR IV III Ia
China (Xilingol)/ Mongolia/ Russian Federation	Dauria International PA (1994)	96064 93538 62684	Dalai Lake Nature Reserve (Dalai Hu) / Mongul Daguur Strict Protected Area (Nomgrog) / Daurskiy State Nature Reserve (Zapovednik)	IV Ib Ia
China (Tibet – Xizang)/ Myanmar China (Tibet)/ Nepal		95792 95789 95772 71350 95785 95784 804 803 26606 26605	Cha Yu Nature Reserve (Zayu) Ba Ji Nature Reserve Nu Jiang He (River) Nature Reserve / Ka Kabo Razi National Park (Hkakaborazi) Zhu Feng Nature Reserve (Zhangmukoan) Jiang Cun Nature Reserve (Qomolangma) / Sagarmatha National Park Langtang National Park Makalu-Barun National Park Makalu-Barun Conservation Area	Ia IV VI Ib VI II II II IV
China/ Pakistan	Taxkorgan (1995)	96118 836	Ta Shi Ku Er Gan Nature Reserve (Taxkorgan)/ Khunjerab National Park	Ib II
China/ Russian Federation	Khanka Lake (1996)	95476 62691	Xing Kai Lake Nature Reserve/ Khankaiskiy Zapovednik	VI Ia
China (Heilongjiang)/ Russian Federation	Amur River Basin	95459 1707	Fenglin Nature Reserve, Biosphere Reserve/ Khinganskiy Zapovednik	VI, BR Ia
China (Heilongjiang)/ Russian Federation		95471 1715	Hong River Nature Reserve/(Hong He) Bol'shekhekhtskiy Zapovednik	VI Ia

Countries	Transboundary Protected Area Complex	WCMC Code	Designated Protected Areas	IUCN Category
China (Guangxi)/		95872 95618	Gu Long Shui Yuan Lin (Qing Long Mountain) Xia Lei Shui Yuan Lin Nature Reserve/	VI VI
Vietnam		10360	Trungkhanh	IV
China/		99776 95742	Guan Yin Shan Nature Reserve Fen Shui Ling Feng Nature Reserve/	VI
Vietnam		10357	Hoang Lien Son #2	IV
India/		1807 691 300296	Katarniaghat Sanctuary Dhudhwa National Park (Dudwa) Laggabaggha Protected Corridor/	IV II
Nepal		1308 1309	Royal Bardia National Park Royal Sukla Phanta Wildlife Resrve (Suklaphanta)	II IV
India/		4578 12414 4543	Shilli Sanctuary (Valmiki) Sohagibarwa Sanctuary Udaipur Sanctuary/	IV IV IV
Nepal		805 10089	Royal Chitwan National Park Parsa Wildlife Reserve	II IV
India/		19683	Kachchh Desert Sanctuary/	IV
Pakistan		6684	Rann of Kutch Wildlife Sanctuary	IV
Indonesia (Kalimantan)/		8673	Gunung Bentuang dan Karimun National Park/	II
Malaysia (Sarawak)		1300 12250	Lanjak Entimau Wildlife Sanctuary Batang Ai National Park	IV II
Indonesia/		29966	Wasur National Park/	II
Papua New Guinea	Wasur/Tonda (1997)	4200 4202	Tonda Wildlife Management Area Maza Wildlife Management Area	VI VI
Kazakhstan/		1671 62634	Aksu-Dzhabagly Zapovednik Dzhambulskiy Zakaznik/	Ia IV
Kyrgyz Republic/		1675 1674	Besh-aral'sky Zapovednik Sary-Chelekskiy Zapovednik Chatkal Mountains Biosphere Reserve (Sary-Chelek)/	Ia Ia BR
Uzbekistan	W. Tien Shan/ Chatkal Mountains	1761	Ugam-Chatkal National Park (Chatkalsky Zapovednik) Mount Chatkal Biosphere Reserve	II BR
Laos/		18893	Phou Xiang Thong National Biodiversity Conservation Area/	VI
Thailand		39518 4674	Pha Tam National Park Kaeng Tana	II II
Laos/		61496	Nam Et National Biodiversity Conservation Area/	VI
Vietnam		10363	Sop Cop Nature Reserve	IV

Appendix 2

Regional maps of internationally adjoining protected areas

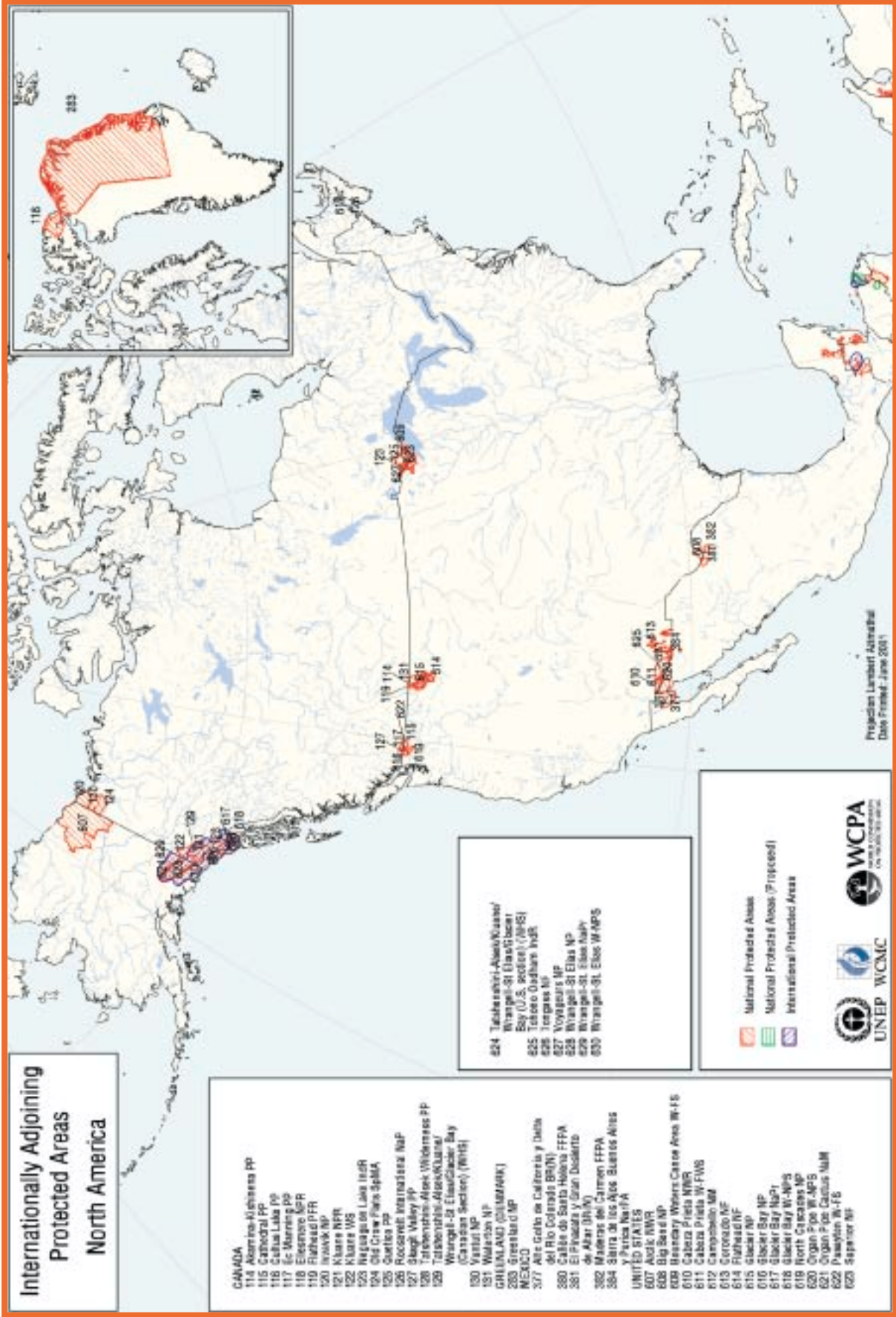
Prepared by the United Nations Environment Programme's World Conservation Monitoring Centre (2001).

Key to Maps		
International Sites		
(BR)	MAB Biosphere Reserve	MPA Marine Protected Area
(RS)	Ramsar Site	MS Marine Sanctuary
(WHS)	World Heritage Site	MjCA Major Conservation Area
		NAr Nature Area (Paraje Natural)
		NBCA National Biodiversity Conservation Area
National Sites		
AR	Anthropological Reserve	NBZ National Biosphere Zapovednik
BR(N)	Biosphere Reserve (National)	NCA Nature Conservation Area
BiR	Biological Reserve	NCL Nature Conservation Law
BioRg	Biological Refuge	NCP National Conservation Park
CA	Conservation Area	NF National Forest
CF	Classified Forest	NLNI Natural Landscape of National Interest
CFoR	Coniferous Forest Reserve	NM Natural Monument
CHA	Controlled Hunting Area	NNR National Nature Reserve
ETC	Other area	NNaA National Nature Area
FAUP	Forest Area under Protection	NP National Park
FFPA	Flora and Fauna Protection Area	NPR National Park Reserve
FPR	Faunal Production Reserve	NR Nature Reserve
FR	Faunal Reserve	NWR National Wildlife Refuge
FiscR	Fiscal Reserve	NaM National Monument
FoR	Forest Reserve	NaP Nature Park
GMA	Game Management Area	NaPr National Preserve
GP	Game Park	NaR National Reserve
GR	Game Reserve	NarPA Natural Resources Protection Area
GS	Game Sanctuary	NatNP Natural National Park
HR	Hunting Reserve	NatR Natural Reserve
HZ	Hunting Zone	NatZ Nature Zapovednik
IP	International Park	NatZk Zakaznik (Kazakstan)
IndP	Indigenous Park	NtM Nature Monument
IndR	Indigenous Reserve	OCK Area of Protected Landscape
LP	Landscape Park	P Park
LPA	Landscape Protection Area	
LitCA	Littoral Conservation Area	
MNaR	Marine National Reserve	

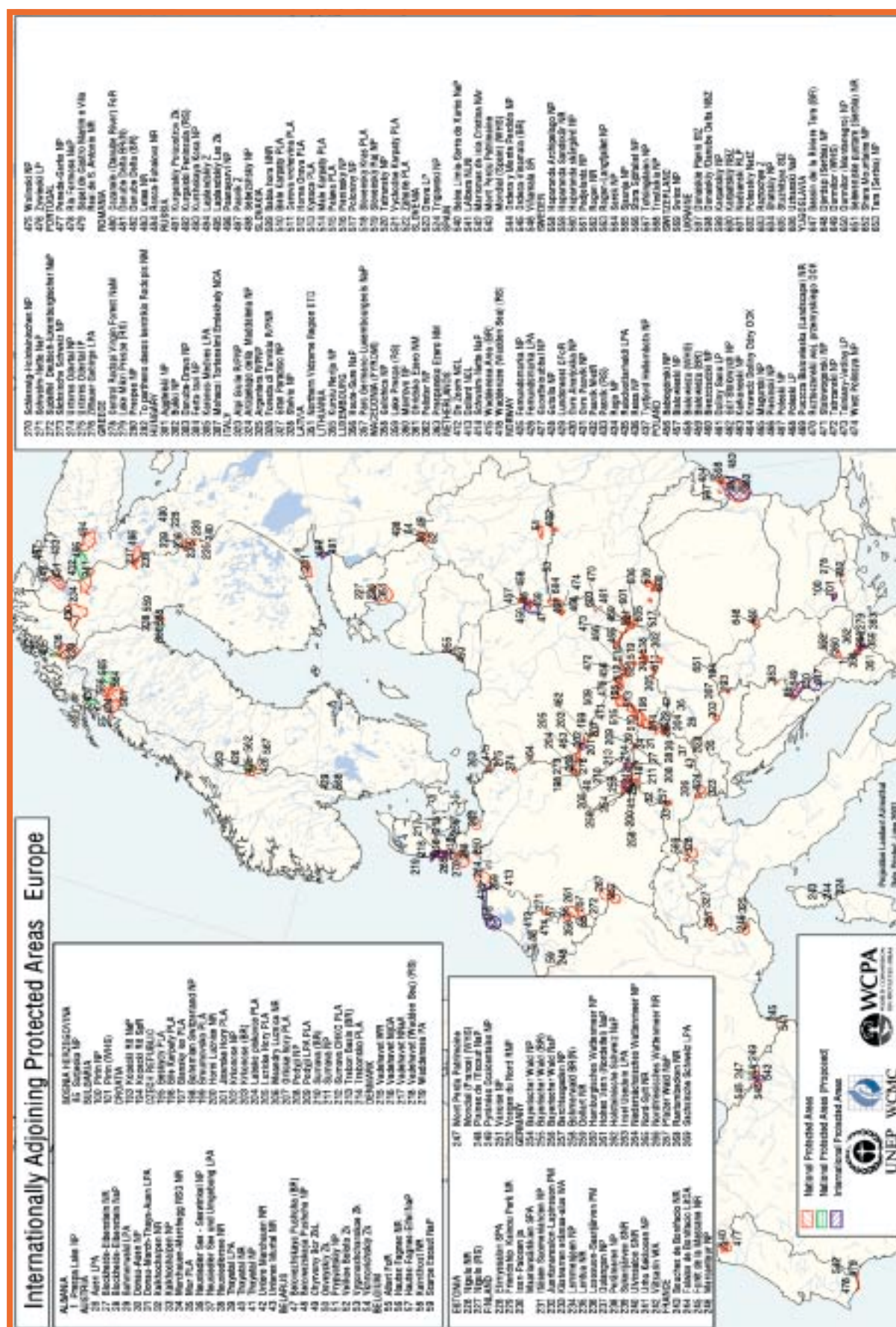
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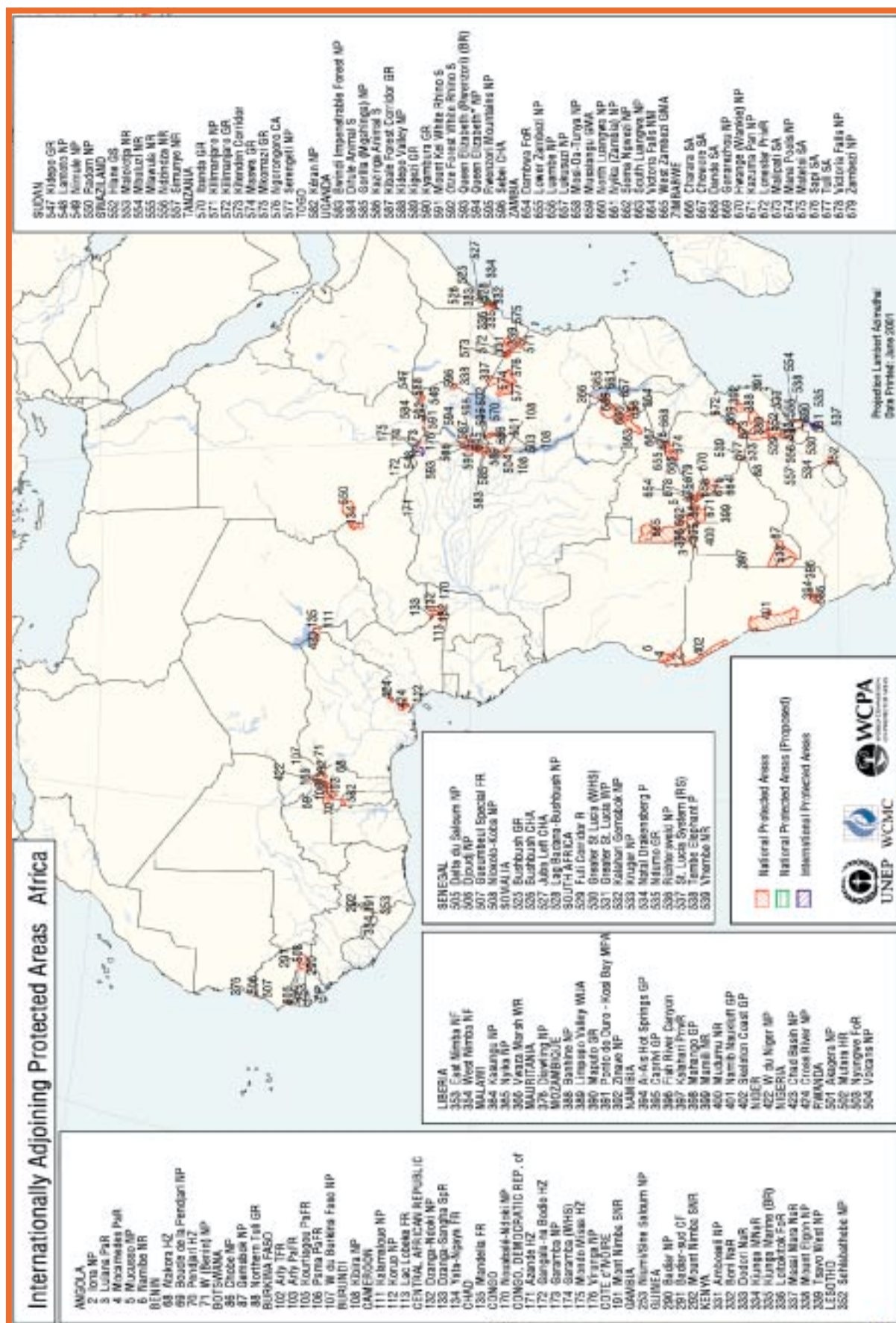
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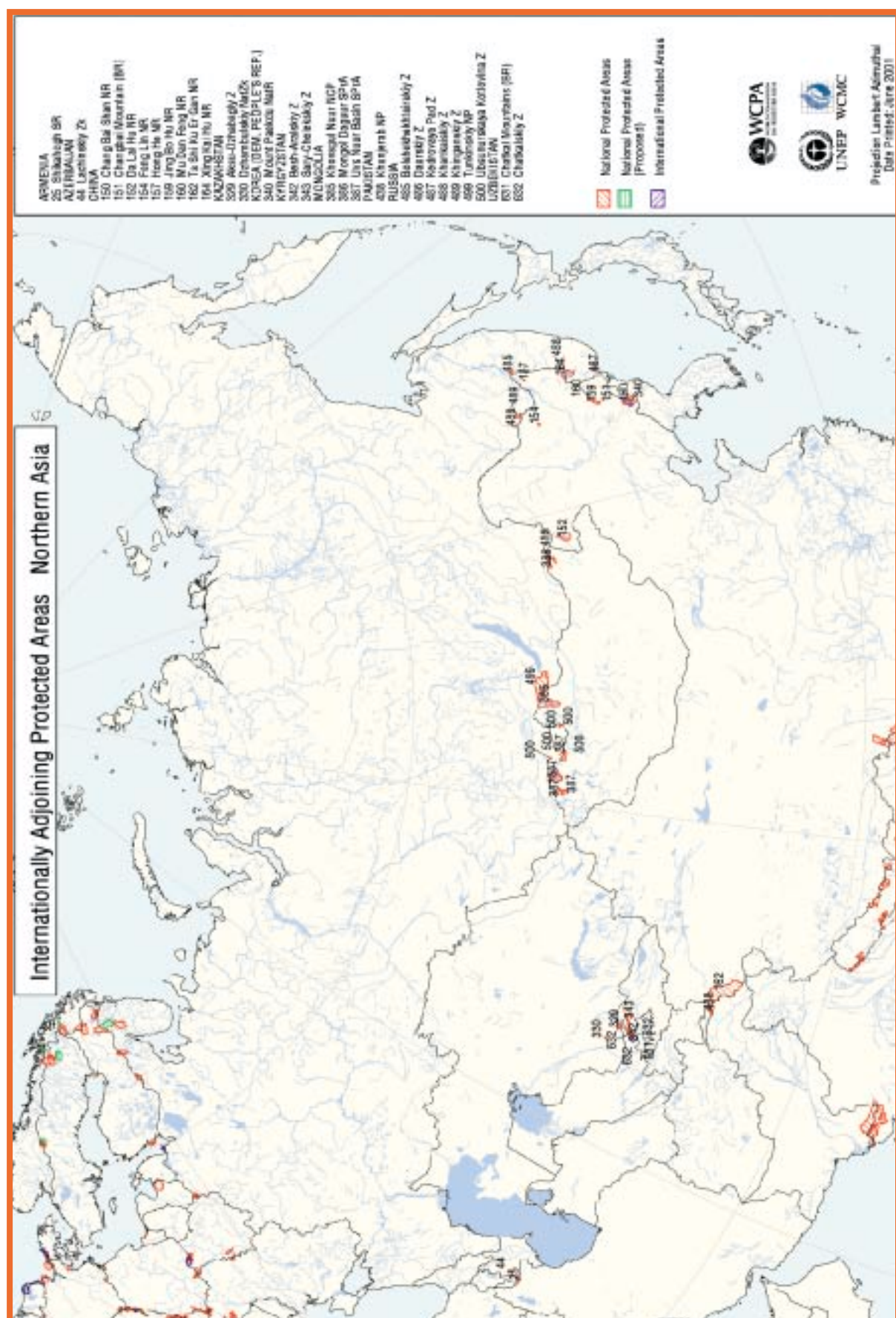
PA	Protected Area	SP	State Park
PB	Protected Biotope	SPA	Special Protected Area
PC	Protected Corridor	SPrA	Strict Protected Area
PFR	Provincial Forest Reserve	SR	State Reserve
PFo	Protected Forest	SpMA	Special Management Area
PL	Protected Landscape	SpR	Special Reserve
PLA	Protected Landscape Area	StExF	State Extractive Forest
PM	Protected Mire	StZ	State Zakaznik
PP	Provincial Park	TFR	Total Faunal Reserve
PZ	Protective Zone	W-FS	Wilderness (Forest Service)
PaFR	Partial Faunal Reserve	W-FWS	Wilderness (Fish and Wildlife Service)
PaR	Partial Reserve	W-NPS	Wilderness (National Park Service)
PrivR	Private Reserve	WA	Wilderness Area
ProvR	Provincial Reserve	WMA	Wildlife Management Area
R	Reserve	WP	Wetland Park
R/PNP	Regional/Provincial Nature Park	WR	Wildlife Reserve
R/PNR	Regional/Provincial Nature Reserve	WRef	Wildlife Refuge
RLP	Regional Landscape Park	WS	Wildlife Sanctuary
RNP	Regional Nature Park	WUA	Wildlife Utilization Area
RNaCR	National Resources Reserve	WetR	Wetland Reserve
RVS	Wildlife Refuge	Z	Zapovednik
RZ	Reserved Zone	Zk	Zakaznik
S	Sanctuary	ZkL	Zakaznik (Local)
SA	Safari Area		
SNR	Strict Nature Reserve		

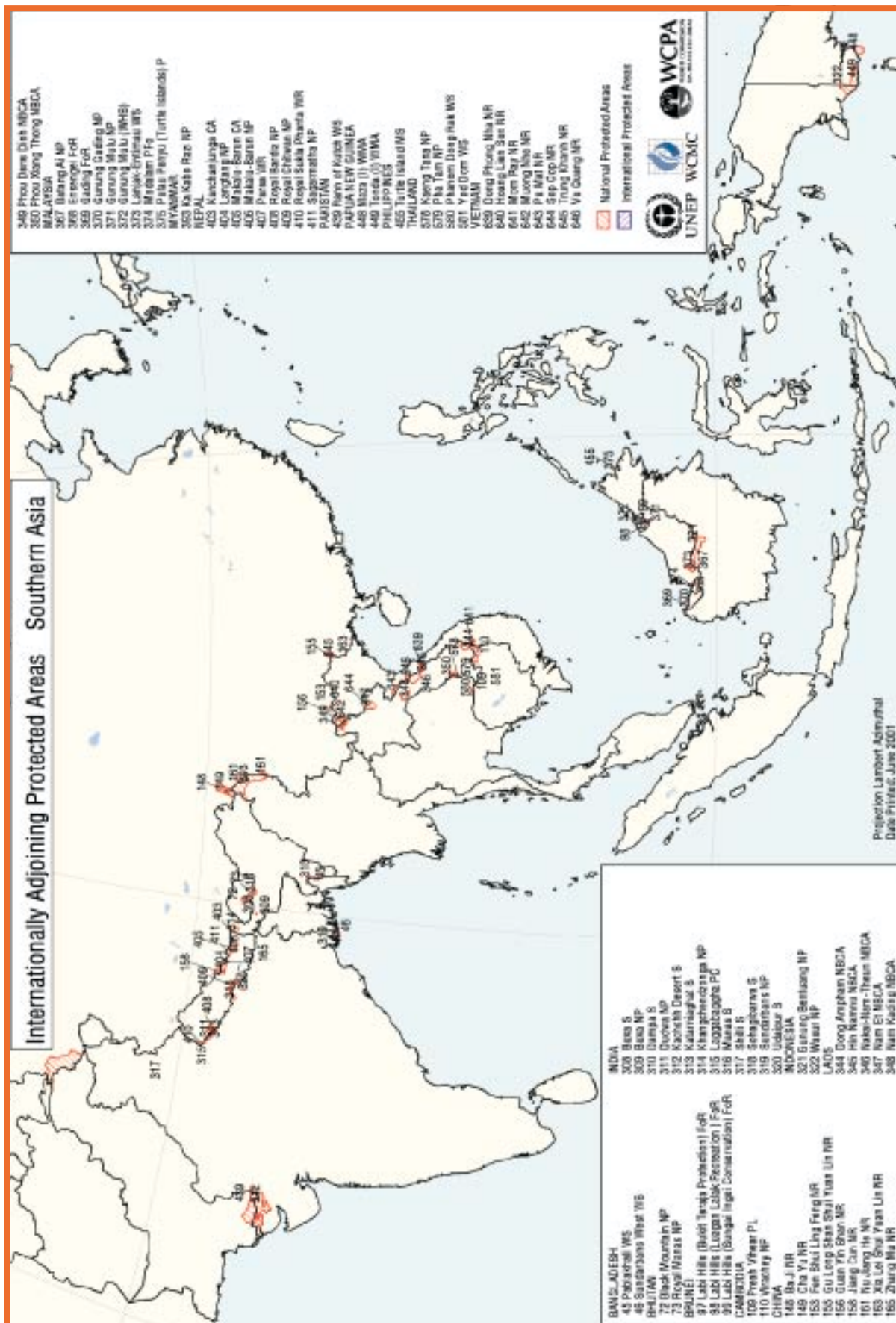












Appendix 3

Memorandum of Understanding between the National Park Service of the Department of the Interior of the United States of America and Parks Canada of the Department of Canadian Heritage of the Government of Canada, on co-operation in management, research, protection, conservation, and presentation of National Parks and National Historic Sites (May 1998)

The National Park Service of the Department of the Interior of the United States of America and Parks Canada of the Department of Canadian Heritage of the Government of Canada, hereinafter the Participants:

Recognising the advanced co-operation which exists between the National Park Service and Parks Canada, hereinafter referred to as the “Participants”, in the management, planning, development, preservation, research and conservation of national parks, national historic sites, and national cultural heritage resources and sites of the United States and Canada;

Noting the mutual objectives and interests of the Participants declared in the “Convention concerning the Protection of the World Cultural and Natural Heritage” adopted at Paris, November 16, 1972;

Aware that cultural heritage properties and sites on the national territory of each Participant commemorate archaeological and historical events and periods that are of significance to both nations and, in many cases, to the world heritage;

Recognising that such sites and properties in both countries, the United States and Canada, represent irreplaceable elements of the heritage and identity of the people of both nations;

Noting the mutual interest in continuing and strengthening the management and conservation of national parks close or contiguous with the border for the purpose of conserving shared ecosystems;

Recognising the importance and relevance of ecological and commemorative integrity in the design, management, and operations of national parks and protected heritage sites for the purpose of preserving and conserving these areas for the use and enjoyment of present and future generations;

Convinced that regular and sustained co-operation between the Participants is of significant mutual benefit in enhancing their respective programs and responsibilities;

Have reached the following understanding:

ARTICLE 1

This Memorandum has as its objective the creation of a framework for co-operation and co-ordination between Participants concerning the commemoration, conservation, and presentation of natural and cultural heritage sites.

ARTICLE 2

1. The Participants will establish an Inter-governmental Committee, to be cochaired by the Director of the National Park Service and the Assistant Deputy Minister of Parks Canada or their designated representative, to review and discuss progress on projects, possible areas for future co-operation, and issues between the Participants. The Committee will meet periodically, alternating between the two countries.
2. The Committee will review and update the list of substantive and geographical areas of high priority for co-operation and collaboration between the Participants, as set forth in the Appendix. The co-Chairs will designate appropriate representatives to oversee, direct, jointly negotiate, approve, implement, and monitor the progress of co-operative activities developed to accomplish the objectives outlined in this Memorandum.
3. Summaries of the progress of activities undertaken by the Participants will be provided to the Inter-governmental Committee for its review during its meeting, as requested. Documentation will contain a description, goals and objectives, procedures, identification of participants, and timing. Any changes to the agreed upon areas of co-operation will have concurrence of the co-Chairs.

ARTICLE 3

1. The forms of co-operative activities under this Memorandum may include exchanges of technical and professional information; participation in joint seminars, conferences, training courses, and workshops in areas of professional and technical interest; joint planning and research teams; and exchanges and /or secondment of personnel, specialists and consultants.
2. Topics of mutual interest and benefit for ongoing or future co-operative activities may include but are not limited to :
 - A. Strengthening participation in the World Heritage Convention, and complementary participation in international membership organisations such as the World Conservation Union (IUCN) and particularly its World Commission on Protected Areas, the International Council on Monuments and Sites (ICOMOS), and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and multi-lateral conservation initiatives such as Biosphere Reserves.

- B. Examination of issues in the conservation and management of heritage resources, and the planning, development, management, and administration of nationally and internationally significant areas and their role in regional economic development and environmental planning.
 - C. Research, inventory, documentation, and monitoring of natural and cultural heritage resources and sites and related conservation technologies.
 - D. Planning, sustainable design, and appropriate development of protected heritage sites.
 - E. General public information programs and materials to increase understanding of and community support for conservation objectives and heritage.
 - F. Joint identification, conservation, and interpretation of heritage sites and transboundary resources of shared significance to the people of the United States and Canada.
 - G. Development, when feasible, of joint heritage tourism initiatives.
- 3. High priority geographic areas of potential co-operation between the Participants are set forth in the Appendix to this Memorandum. The Appendix will be reviewed and updated during the meetings of the Inter-governmental Committees.
 - 4. For involvement requested by Parks Canada that extends into subjects outside the scope of National Park Service, the National Park Service may, with the concurrence of Parks Canada, and to the extent compatible with existing laws, regulations, and policies of the Government of the United States of America, enlist the participation of other organisations or agencies of the United States of America in the development and implementation of activities within the scope of this Memorandum. For involvement requested by National Parks Service that extends into subjects outside the scope of Parks Canada, Parks Canada may, with the concurrence of the National Park Service, and to the extent compatible with existing laws, regulations, and policies of the Government of Canada, enlist the participation of other organisations and agencies of the Government of Canada, in the development and implementation of activities within the scope of this Memorandum.
 - 5. Where the Participants decide an initiative is of paramount importance and where operational policies need to be modified or amended to permit the initiative to proceed, the Participants concur amendment and modification of existing instruments will be considered and may be undertaken.

ARTICLE 4

Co-operation under this Memorandum will be subject to the availability of funds and personnel to each Participant, and to the laws and regulations of each country. The nature and extent of funding for each project or activity will be decided upon by the Participants before its commencement.

ARTICLE 5

Information transmitted by one Participant to the other Participant under this Memorandum will be accurate to the best knowledge and belief of the transmitting Participant. The transmitting Participant does not warrant the suitability of the information transmitted for any particular use of or application by the receiving Participant.

ARTICLE 6

Nothing in this Memorandum will be construed to prejudice other existing or future Agreements concluded between the Governments of the United States of America and Canada, nor will it affect the rights and obligations of the two Governments under international agreements to which they are party.

ARTICLE 7

This Memorandum will take effect upon signature, and will remain in effect for five years. It may be extended, amended and annexed by written mutual consent of the Participants.

This Memorandum may be terminated at any time by either Participant, upon written notification through their diplomatic channels, such notification to be effective ninety days after the date of notification. The termination of the Memorandum will not affect the validity or duration of projects under this Memorandum, which are initiated prior to such termination, subject to availability of funds.

Done at Washington, DC on this 20th day of May 1998, in duplicate, in English and French, both texts being equally valid.

APPENDIX

The natural and cultural heritage resources in the following border regions between Canada and the United States have been identified as priority areas for possible collaboration between Parks Canada and the U.S. National Park Service pursuant to this Memorandum of Understanding:

World Heritage site in the St. Elias Mountains composed of Kluane National Park, Wrangell-St. Elias National Park and Preserve, Glacier Bay National Park and Preserve, and Tatshenshini-Alsek Provincial Wilderness Park

- Waterton/Glacier International Peace Park World Heritage site
- Lake Superior
- St Croix River and Island
- Gulf of Maine
- Roosevelt-Campobello International Park
- Perry's Victory and International Peace Memorial

- Chilkoot Trail
- Pacific coast marine parks
- Yellowstone to Yukon Corridor
- Thousand Islands Area of the St Lawrence River
- Underground Railroad

It is understood that the priority areas listed in this Appendix may be revised from time to time by the inter-governmental Committee.

Appendix 4

The UNESCO Man and the Biosphere (MAB) Programme's Seville +5 Recommendations for the establishment and functioning of Transboundary Biosphere Reserves (UNESCO, 2000).

As borders between States are political and not ecological, ecosystems often occur across national boundaries, and may be subject to different, or even conflicting, management and land use practices. Transboundary Biosphere Reserves (TBR) provide a tool for common management. 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. It corresponds to the increasing recognition of the appropriateness of the ecosystem approach, for conservation and sustainable use of biological diversity.

The recommendations presented below deal with the establishment of TBR, the measures which can be taken to respond to the MAB principles and in particular the goals of the Seville Strategy and the way of ensuring that a TBR truly operational. However, it should be kept in mind that, although the biosphere reserve provides a general framework for action in a transboundary location, the real-world situations will vary very much from a place to another, and flexibility is needed even more than in a national context.

The process leading towards the official designation of a TBR can include many forms of co-operation and co-ordination among the existing areas on either side of a border. These serve as a basis for formalising the TBR proposal and should be encouraged.

Procedure for the establishment of a TBR

Up until now, all existing TBR were established as separate biosphere reserves in individual countries before being designated as TBR. However, it could be envisaged in the future that a TBR be established jointly by the countries concerned in one step. In both cases, the ultimate aim should be to have one *functional biosphere reserve*.

In these two different scenarios, the following respective procedures are recommended:

- Establishment of a biosphere reserve on each side of the border;
- or, when the TBR is established in one step, definition of the zoning of the area according to the general criteria for designation of biosphere reserves.
- Identification of local and national partners and establishment of a working group to define the basis and identify key issues for co-operation.

- Signing of an official agreement between governmental authorities regarding the TBR.
- Nomination of the various parts by the respective State authorities;
- or, when the TBR is established in one step, joint nomination for the whole area by the concerned State authorities.
- In both scenarios, indication of the main components of a plan for co-operation in the future.
- Official designation by ICC MAB of UNESCO.

Functioning of the TBR

Among the measures recommended to make the TBR function effectively, priority should be given to:

- Preparation and adoption of a zonation plan for the whole area and implementation of the zonation by strict protection of core areas, delimitation of the buffer zones and co-ordinated objectives for the transition areas; this implies that the countries concerned have a common understanding of the characteristics of each of the zones, and that similar management measures are in place for each zone.
- When the zonation plan is defined, publication on a joint map of the zonation.
- Definition of common objectives and measures, work plan, time table, and required budget; this should be a demand driven process, based on perceived needs or management requirements. This work plan should take into account the elements listed under the goals of the Seville Strategy as suggested below.
- Identification of potential funding sources for the work plan and joint or simultaneous application for these funds.
- Establishment of a means of communication between the co-ordinators/managers of the different parts of the TBR, including electronic mail when feasible.
- Efforts towards harmonised management structures on each side.

Institutional mechanisms

The TBR will not function without a joint structure devoted to its co-ordination. Although this structure can vary greatly from one TBR to another, the following points can be recommended:

- The co-ordinating structure is representative of various administrations and the scientific boards, as well as the authorities in charge of the protected areas, the representatives of local communities, interested and affected groups, including youth, and of the private sector.
- The NGO sector in the area is also represented in the structure.

- This structure has a permanent secretariat, and a budget is devoted to its functioning.
- A person is designated on each side to act as a focal point for co-operation.
- General and regular meetings of the co-ordinating structure are complemented by thematic groups, on an *ad hoc* basis, in order to create a platform for discussion among stakeholders from the countries concerned, with a view to promote all opportunities for exchanging views and knowledge.
- Joint staff teams are operational for specific tasks.
- An association is set up with the specific aim of promoting the TBR.

Responding to the Goals of the Seville Strategy

Goal I: Use Biosphere Reserves to Conserve Natural and Cultural Diversity

In order to develop a concerted strategy for conservation, the following measures can be recommended:

- Co-ordination of regulatory measures on protection and, in case of incompatibility, their harmonisation.
- Common or co-ordinated policies for threatened and protected species and ecosystems, migratory species, as well as control of invasive alien species.
- Common or co-ordinated policies for rehabilitation and restoration of degraded areas.
- Co-ordinated action against illegal activities such as wildlife poaching and unauthorised logging.

Goal II: Utilize Biosphere Reserves as Models of Land Management and of Approaches to Sustainable Development

The human component of biosphere reserves and their role in promoting approaches to sustainable development can lead to a variety of forms of co-operation, ranging from the use of natural resources to the protection of cultural heritage. Among the measures that can be recommended in TBR are the following:

- Co-ordination of management practices, for example in forestry, logging, forest regeneration, or in the field of pollution control.
- Identification of possible perverse incentive and promotion of viable sustainable alternatives.
- Elaboration and supporting of the implementation of a joint tourism policy.
- Promotion of partnership among various groups of stakeholders having the same interests, in order to make the TBR a common project.
- Promotion of participation of local communities in the TBR, including local NGOs.

- Promotion of joint cultural events and fostering of co-operation on cultural and historical heritage preservation.
- Developing of common strategies for planning based on research and monitoring.

Goal III: Use Biosphere Reserves for Research, Monitoring, Education and Training

Joint activities on research and monitoring should be led by scientific boards and planned in joint sessions; these activities could be carried out along the following lines:

- Define and implement joint research programmes.
- Develop common data collection formats, indicators, monitoring and evaluation methods.
- Exchange existing data, including maps and geographical information, and facilitate access to results of research.
- Share scientific information, including through the organisation of workshops, conferences, etc.
- Share equipment when feasible.
- Jointly publish results of common research.
- Develop joint mapping and GIS.

Many joint activities in the field of education and training can be recommended, such as:

- Organisation of joint training courses and technical meetings for managers and field staff.
- Promotion of staff exchanges.
- Promotion of understanding of neighbouring country's culture.
- Organisation of linguistic training when needed.
- Exchanges of scientists between universities and academic and research institutions of each country.
- School exchanges.
- Launching of participatory training programmes for various groups of stakeholders.

Information and public awareness are crucially important to develop a common understanding and build support for and appropriation of the objectives of the TBR by the different stakeholders. Therefore, the rationale and objectives of the TBR should be explained by varied means to different targets groups (decision makers, local populations, visitors, schools, scientists, managers, etc). Among other activities, the following can be recommended:

- Develop a common public relations strategy with the aim of raising awareness and promoting the TBR.
- Produce information material, brochures, books, etc.

- Organise exhibits and events around the TBR.
- Develop a common logo for the TBR, as well as a common design for published material.
- Implement joint demonstration projects.
- Set up a common internet site.

Appendix 5

Bilateral agreement between the Government of the Republic of Botswana and the Government of the Republic of South Africa on the recognition of the Kgalagadi Transfrontier Park (April 1999)

PREAMBLE

The Government of the Republic of Botswana (hereinafter referred to as “Botswana”) and the Government of the Republic of South Africa (hereinafter referred to as “South Africa”) (hereinafter also jointly referred to as “the Parties”),

RECOGNISING the principle of sovereign equality and territorial integrity of their states;

CONSCIOUS of the benefits to be derived from close co-operation and the maintenance of friendly relations with each other;

ACKNOWLEDGING the necessity to preserve the environment and in particular the unique ecosystem of the Kalahari for the benefit of all the people of Southern Africa; and

DESIRING to extend, maintain and protect the flourishing ecosystem of the Kalahari through the recognition of the Kgalagadi Transfrontier Park;

HEREBY AGREE as follows:

ARTICLE 1

Recognition of the Kgalagadi Transfrontier Park

Botswana and South Africa hereby jointly recognise the Kgalagadi Transfrontier Park in a manner that the area which is composed of the Gemsbok National Park in the Republic of Botswana and the Kalahari Gemsbok National Park in the Republic of South Africa shall be retained as far as may be in its natural state as an undivided ecosystem for the benefit of biodiversity conservation, research, visitors and the larger community with particular reference to those communities adjacent to the Park.

ARTICLE 2

Co-Operation

- 1) The Parties undertake, respectively, to procure that the Gemsbok National Park and the Kalahari Gemsbok National Park (hereinafter jointly referred to as “the Parks” and separately as “the Park”) be managed and controlled in accordance

with the Management Objectives contained in this Agreement in general and in particular the Management Plan agreed to between the Botswana Department of Wildlife and National Parks (hereinafter referred to as "the Wildlife Department") and the South African National Parks (hereinafter referred to as "the SANP").

- 2) The Parties undertake –
 - a) to procure the co-ordination of the management, control and the development of the Parks;
 - b) to consult, assist and support each other in the implementation of the Management Objectives;
 - c) to use their best endeavours to harmonise their national legislation and remove legal and practical obstacles or impediments where possible in order to facilitate the integration of the management of the Parks into a single ecological and tourism unit; and
 - d) to achieve an equitable apportionment of revenues generated by the Parks, provided that the audited gate fees for entry into the Parks shall be shared equally between the Parties, while all other tourism and commercial revenues shall accrue to the Park generating such revenue unless otherwise agreed.
- 3) The Parties undertake to enter into further agreements which may be required to give effect to the spirit and intent of this Agreement.

ARTICLE 3

Management Objectives

- 1) The Management Objectives of the creation of the Kgalagadi Transfrontier Park, shall be –
 - a) to guarantee the long term conservation of the wildlife resources in the southern Kalahari which will help to maintain the integrity of the Kalahari ecosystem;
 - b) to share and pool expertise and experience between the Wildlife Department and SANP on a good neighbourly basis;
 - c) to increase the local and international profile of this important conservation area, thereby greatly enhancing its potential as a tourist destination;
 - d) to encourage the full realisation of the economic potential of the Parks and surrounding areas which will bring economic benefits to the Republic of Botswana and the Republic of South Africa especially to the local communities adjacent to the Parks;
 - e) to develop joint promotional campaigns that will stimulate the two-way flow of tourists, thereby increasing the tourism potential for the Republic of Botswana and the Republic of South Africa and taking steps to facilitate the freedom of movement within the Kgalagadi Transfrontier Park;

- f) to comply with the requirements of international law regarding the protection of the environment; and
 - g) to integrate, as far as possible, the managerial, reservation, research, marketing and other systems of the Wildlife Department and SANP in respect of the Parks.
- 2) The Management Objectives shall, in the first instance, be implemented through the Wildlife Department and SANP concluding a Record of Understanding in which provision is made for a detailed Management Plan specifying practical steps for the achievement of the Management Objectives. The Record of Understanding shall also provide for the Kgalagadi Management Agency (hereinafter referred to as “the Agency”), which shall oversee the implementation of the Management Plan.
- 3) Subject to this Agreement, the Agency shall determine its own meeting times, rules and procedures.
- 4) Meetings of the Agency shall take place at such venue decided upon by the Agency.

ARTICLE 4

Implementation

- 1) Botswana hereby delegates such powers and functions to the Wildlife Department as are required for the co-ordination of the management of the Gemsbok National Park with that of the Kalahari Gemsbok National Park and for the implementation of the Management Objectives, including, but not limited to, the power to enter into further agreements with the SANP, for matters related to this Agreement.
- 2) South Africa hereby –
 - a) appoints the SANP to act as its agent for the purpose of co-ordinating the management of the Kalahari Gemsbok National Park with that of the Gemsbok National Park and to ensure the implementation of the Management Objectives; and
 - b) delegates such powers and functions to the SANP as are required for the implementation of the Management Objectives, including, but not limited to, the power to enter into further agreements with the Wildlife Department for matters related to this Agreement.

ARTICLE 5

Kgalagadi Transfrontier Park Foundation

- 1) The Kgalagadi Transfrontier Park Foundation (hereinafter referred to as “the Foundation”) is hereby established, which shall in a manner provided for by this Agreement direct the activities of the Kgalagadi Transfrontier Park. The Foundation shall provide the representatives of Botswana and South Africa with the opportunity to share ideas, develop proposals, provide general guidance with

respect to activities undertaken in the Kgalagadi Transfrontier Park and take steps that are in accordance with this Agreement to facilitate the integration and joint management of the Parks.

- 2) The Parties hereby respectively nominate the following persons in an ex officio capacity as founding members of the Foundation:

On behalf of Botswana:

- Hon. Mr. K.G. Kgoroba, Minister of Commerce and Industry;
- Hon. Mr. L.T.J. Mothibamele, Member of Parliament for Kgalagadi;
- Ms. T.C. Moremi, Permanent Secretary in the Ministry of Commerce and Industry; and
- Mr. S.C. Modise, Director of the Department of Wildlife and National Parks.

On behalf of South Africa:

- Dr. Z.P. Jordan, Minister of Environmental Affairs and Tourism;
- Mr. M. Dipico, Premier of the Northern Cape Province;
- Dr. V. Khanyeli, Chairperson of the South African National Parks; and
- Mr. M. Msimang, Chief Executive of the South African National Parks.

- 3) The founding members may, by consensus, co-opt further persons as founding members.
- 4) The founding members shall proceed, without delay, to cause the Foundation to be incorporated under section 21 of the South African Companies Act, 1973 (Act No. 61 of 1973). In view of the joint sponsorship of the Foundation, the founding members shall secure the authority of the South African Reserve Bank for the disbursement of funds of the Foundation to promote the financing of the Parks in an equitable manner. The SANP shall, for as long as the Parties deem fit, provide secretarial services to the Foundation whose administrative address shall be the same as that of the SANP.
- 5) The objective of the Foundation shall be to promote the conservation of the natural environment of the Parks and to develop the potential of the Parks as a tourist destination.
- 6) To implement its objective, the Foundation shall –
- a) monitor the implementation of the Management Plan;
 - b) render advice on matters arising from this Agreement;
 - c) initiate steps that will facilitate further co-operation and integration of activities as may be delegated to it from time to time by the Parties;
 - d) and receive donations dedicated to the implementation of this Agreement from third parties and distribute such donations equitably to the Wildlife Department and SANP.
- 7) The chairperson of the Foundation shall rotate annually between the Parties with a representative of Botswana acting as chairperson for the first year.

- 8) A quorum for a meeting of the Foundation shall be four members, provided that at least two members designated by each of the Parties shall be present.
- 9) Decisions of the Foundation shall be taken by consensus. The Foundation shall, subject to this Agreement, determine its own meeting times, rules and procedure, and venue for meetings provided that it shall meet at least once per annum.

ARTICLE 6

Financial Matters

- 1) In order to discharge their obligations under this Agreement, the Parties shall annually make sufficient funds available to cover any expenses that may arise from the implementation of this Agreement, provided that the Wildlife Department, SANP and the Foundation shall use their best endeavours to obtain financial and other means of support from their own sources as well as from other sources for the implementation of the Management Objectives and the Management Plan.
- 2) Donations received by the Foundation shall be paid into a bank account and equitably allocated between the Parks in accordance with the priorities as identified by the Kgalagadi Management Agency.
- 3) The Foundation shall annually submit audited financial statements of its affairs to the Parties.

ARTICLE 7

Respect for Domestic Law

This Agreement shall in no way be construed as derogating from any provision of the domestic law in force in the countries of the Parties or any other agreement entered into between the Parties.

ARTICLE 8

Settlement of Disputes

- 1) Any dispute between the Parties arising out of the interpretation or implementation of this Agreement shall be settled amicably through consultation or negotiation between the Parties, provided that a dispute may be referred for mediation when necessary.
- 2) If an amicable settlement of the dispute is not reached through mediation, the dispute shall be settled through arbitration by an Arbitration Tribunal appointed on the basis that each Party shall appoint an arbitrator and the two arbitrators appointed by the Parties shall appoint a third arbitrator who shall act as chairperson of the Arbitration Tribunal.

- 3) The Arbitration Tribunal shall decide upon its own procedures. The decision of the Tribunal shall be in writing and shall be supported by a majority of its members. Such a decision shall be final and binding upon the Parties.

ARTICLE 9

Competent Authority

The competent authorities responsible for the implementation of this Agreement shall be

- a) on behalf of the Republic of Botswana, the Department of Wildlife and National Parks; and
- b) on behalf of the Republic of South Africa, the South African National Parks.

ARTICLE 10

Entry into Force

This Agreement shall enter into force on the date on which each Party has notified the other in writing through the diplomatic channel of its compliance with the constitutional requirements necessary for the implementation of this Agreement. The date of entry into force shall be the last notification.

ARTICLE 11

Termination

This Agreement may be terminated by either Party giving one year's written notice in advance through the diplomatic channel of its intention to terminate this Agreement.

ARTICLE 12

Amendment

This Agreement may be amended through an exchange of notes between the Parties through the diplomatic channel.

IN WITNESS WHEREOF the undersigned, being duly authorised by their respective Governments, have signed and sealed this Agreement in duplicate in the English language, both being equally authentic.

Appendix 6

Memorandum of Understanding in relation to the co-operative management of the Australian Alps (Revised 6 November 1998)

This MEMORANDUM OF UNDERSTANDING is made
on the 6th day of November 1998 between:

Senator the Hon Robert Hill, the Commonwealth Minister for the Environment and Heritage being the Minister responsible for the Commonwealth *National Parks and Wildlife Conservation Act 1975* of the first part;

The Hon Pam Allan MP, Minister for the Environment for the State of New South Wales being the Minister having responsibility for administration of the National Parks and Wildlife Service of New South Wales of the second part;

Mr Brendan Smyth, MLA, Minister for Urban Services for the Australian Capital Territory being the Minister having responsibility for the administration of Environment ACT of the third part; and

The Hon Marie Tehan MP, Minister for Conservation and Land Management for the State of Victoria being the Minister having responsibility for Parks Victoria of the fourth part;

WHEREAS

1. In June 1986 a Memorandum of Understanding was entered into in relation to the Co-operative Management of the Australian Alps National Parks,
2. The original Memorandum of Understanding was amended and re-signed on 2 December 1989 and again on the 29 November 1996.
3. Pursuant to the objectives of that Memorandum the parties now wish to amend and upgrade the Memorandum to reflect changes in the operation of the Memorandum in the intervening years, and to set a focus for the future,
4. Under the *National Parks and Wildlife Conservation Act 1975* of the Commonwealth, the Director of National Parks and Wildlife has power to perform any of his/her functions in co-operation with a State or, with an authority of a State or Territory,
5. The National Parks and Wildlife Service of New South Wales, Environment ACT, and Parks Victoria, are the agencies responsible for the care, control and management within their respective State or Territory of the areas described in Schedule 1. These areas are part of the same biogeographical unit and are hereinafter collectively referred to as the Australian Alps national parks,

NOW THE PARTIES have reached an understanding in regard to the following matters:

1. The parties as from this date hereby further amend the Memorandum of Understanding. The parties to the Memorandum agree that all matters being conducted under the terms of the Memorandum of Understanding prior to this date will continue to be conducted pursuant to the terms set out herein.
2. The parties hereto acknowledge for themselves and on behalf of their Governments that:
 - 2.1 The Australian Alps national parks comprise an area of national significance containing:
 - a) Australia's highest mainland peaks and most spectacular mountain scenery;
 - b) plants and animals unique to Australian alpine and sub-alpine environments;
 - c) a rich heritage of use and belonging by both Aboriginal and non-Aboriginal people;
 - d) an outstanding outdoor recreation and tourism resource for Australians and overseas visitors;
 - e) the headwaters of major river systems flowing from the Australian Alps national parks, supplying snowmelt waters vital for domestic use, industry, irrigation and hydro-electric production in NSW, Victoria, ACT and South Australia; and
 - f) important tourist attractions.
 - 2.2 The national significance of the Australian Alps has been recognised by the Commonwealth and aforesaid State and Territory Governments by the extensive reservation of national parks and other protected areas within the region.
 - 2.3 The management and protection of the Australian Alps national parks to conserve them for all Australians, present and future, require a national commitment extending across State and Territory boundaries.
 - 2.4 There exist Commonwealth and State/Territory responsibilities for the conservation of the unique values of the Australian Alps national parks and the need for joint commitment by the relevant Governments to conserve these values.
 - 2.5 The vision of the Australian Alps co-operative program is of participating Agencies working in partnership to achieve excellence in conservation management and sustainable use through an active program of cross border-co-operation.
3. The parties agree to the following objectives:
 - 3.1 To pursue the growth and enhancement of inter-governmental co-operative management to protect the nationally important values of the Australian Alps national parks.

- 3.2 To co-operate in the best-practice management of the areas listed in Schedule 1 to achieve the following objectives:
 - a) protection of the unique mountain landscapes;
 - b) protection of the natural and cultural values specific to the Australian Alps;
 - c) provision of outdoor recreation and tourism opportunities that encourage the enjoyment and understanding of alpine and sub-alpine environments; and
 - d) protection of mountain catchments.
4. The parties further agree to the following working arrangements.

The Agencies mentioned in Schedule 1 and the Commonwealth Director of National Parks and Wildlife (hereinafter referred to collectively as “the Agencies”) will participate in the following working arrangements:

 - 4.1 The Agencies will consult in the preparation of management plans for each area or in amendments to existing plans, and shall aim to ensure that management plans provide for complementary policies and management practices throughout the Australian Alps national parks;
 - 4.2 The Agencies will consult on matters of resource data collection, policy formulation and, where possible and appropriate, will co-operate in joint actions and other operations relevant to the co-ordinated protection of the values of the Australian Alps national parks;
 - 4.3 The Agencies will exchange information, ideas and expertise relevant to the protection of the nationally important values of the Australian Alps national parks, and will co-operate in the training of staff to manage the Australian Alps national parks;
 - 4.4 The Agencies will co-operate in the enhancement and monitoring of public awareness about the Australian Alps national parks;
 - 4.5 The Agencies will co-operate to provide opportunities for public participation in the management of the Australian Alps national parks; and
 - 4.6 Each Agency will, within the areas for which it has management responsibility, strive to adopt complementary recreation management policies and where appropriate provide recreation facilities and services to enable visitors to effectively use adjacent areas listed in Schedule 1.
5. A liaison committee (known as the Australian Alps Liaison Committee) will be formed in which each Agency will be represented by a senior officer. The function of this committee will be to co-ordinate the development and implementation of co-operative work programs and other arrangements under this Memorandum of Understanding.
6. The Australian Alps Liaison Committee will ensure:
 - 6.1 That a three-year Strategic Plan is submitted to the Ministers through Heads of Agencies for approval, and will be accompanied by a review of the implementation of the previous Strategic Plan;

- 6.2 That a co-operative work program is developed consistent with the Strategic Plan for each financial year;
 - 6.3 That a regular review of progress towards implementing the program is undertaken during the financial year to which it relates;
 - 6.4 That an annual report is submitted to the Ministers, through Heads of Agencies at the end of each financial year;
 - 6.5 Within the capacity of individual Agency budgets, Agencies will contribute funds to be managed by the Liaison Committee for the approved works program under the Memorandum of Understanding. The Liaison Committee may enter into cost-sharing arrangements with one or more State/Territory for projects within the works program; and
 - 6.6 In managing projects under the approved works program, parties agree that a nominated Agency may oversee the implementation of a particular project and act on behalf of other Agencies in the execution of legal contracts and similar arrangements.
7. The Liaison Committee may invite managers of other alpine and sub-alpine parks, conservation reserves or relevant bodies to participate in specific cooperative programs where benefits from consistent management of alpine and sub-alpine environments are expected.
 8. This Memorandum of Understanding shall enter into force on and from the day and year written above and may be amended or terminated at any time by mutual agreement of the parties.
 9. The parties may agree to the inclusion within Schedule 1 of any national park, nature reserve, wilderness area or other compatible conservation reserve containing alpine and sub-alpine ecosystems or communities.
 10. The parties further acknowledge that this Memorandum of Understanding shall not give rise to legal obligations between their respective governments, except as described in Clause 6 above.

Schedule 1

Areas comprising the Australian Alps National Parks

Area	Agency responsible for management
Victoria	
Alpine National Park	Parks Victoria
Snowy River National Park	Parks Victoria
Avon Wilderness	Parks Victoria
Mt Buffalo National Park (<i>added 6/11/98</i>)	Parks Victoria
New South Wales	
Kosciuszko National Park	NSW National Parks and Wildlife Service
Brindabella National Park (<i>added 21/6/96</i>)	NSW National Parks and Wildlife Service
Scabby Range Nature Reserve	NSW National Parks and Wildlife Service
Bimberi Nature Reserve	NSW National Parks and Wildlife Service
Australian Capital Territory	
Namadgi National Park	Environment ACT

IN WITNESS WHEREOF this Memorandum of Understanding has been signed by each responsible Minister on the day and year indicated below.

SIGNED by:

Senator the **Honourable Robert Hill,**

Minister for the Environment and Heritage of the Commonwealth of Australia

SIGNED by the

Honourable Pam Allan MP,

Minister for the Environment for the State of New South Wales

SIGNED by

Mr Brendan Smyth, MLA,

Minister for Urban Services for the Australian Capital Territory

SIGNED by the

Honourable Marie Tehan MP,

Minister for Conservation and Land Management for the State of Victoria

Appendix 7

Some useful references

- Arias, O. and Nations, J.D. 1992. A Call for Central American Peace Parks. *In*: Sheldon, A. and Byers, A.M. (Eds.), *Poverty, Natural Resources, and Public Policy in Central America*. pp. 43–58. Overseas Development Council, Washington, DC, USA.
- Beltrán, J. (Ed.). 2000. *Indigenous and Traditional Peoples and Protected Areas: Principles, Guidelines and Case Studies*. IUCN, Gland, Switzerland and Cambridge, UK and WWF International, Gland, Switzerland.
- Borrini-Feyerabend, G. 1996. *Collaborative Management of Protected Areas: Tailoring the Approach to the Context*. IUCN, Gland, Switzerland. Available also in French, Spanish and Portuguese from the IUCN Social Policy group. <http://www.iucn.org/themes/spg/Tailor/index.html>.
- Borrini-Feyerabend, G. (Ed.). 1997 (reprinted in 2000). *Beyond Fences: Seeking Social Sustainability in Conservation*. 2 volumes. IUCN, Gland, Switzerland. <http://www.bsponline.org/publications/showhtml.php3?14>.
- Borrini-Feyerabend, G., Farvar, M.T., Nguingiri, J.C. and Ndangang, V.A. 2000. *Co-management of Natural Resources: Organising, Negotiating and Learning-by-Doing*. GTZ and IUCN, Kasperek Verlag, Heidelberg, Germany.
- Breymeyer, A. and Noble, R. (Eds.). 1996. *Biodiversity Conservation in Transboundary Protected Areas*. US National Academy of Science, Washington, USA.
- Brunner, R. 1999. Parks for Life – Transboundary Protected Areas in Europe. EUROPARC and IUCN/WCPA. Austrian Ministry of Environment, Youth and Family Affairs, Vienna, Austria.
- Carroll, J.E. 1979. International Peace Parks: A Concept and a Proposal. *In*: Nelson, J.G., Needham, R.D., Nelson, S.H. and Scace, R.C. (Eds.). 1979. *The Canadian National Parks: Today and Tomorrow (Conference No. 2)*. pp.725–730. Heritage Resources Centre, University of Waterloo, Waterloo, Ontario, Canada.
- Cerovský, J. (Ed.). 1996. *Biodiversity Conservation in Transboundary Protected Areas in Europe*. Ecopoint, Prague, Czech Republic.
- Chester, C. 2000. Civil society, international regimes, and the protection of transboundary ecosystems: Defining the International Sonoran Desert Alliance and the Yellowstone to Yukon Conservation Initiative. *Journal of International Wildlife Law and Policy* **2**(2).
- Danby, R.K. 1997. International transborder protected areas: experience, benefits, and opportunities. *Environments* **25**(1):1–14.
- Development Studies Network. 2000. Conflict and peacemaking in the Pacific: Social and gender perspectives. *Development Bulletin* **53**.
- Financing Protected Areas Task Force of the World Commission on Protected Areas (WCPA) of IUCN, in collaboration with the Economics Unit of IUCN. 2000. *Financing Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK.

- Griffin, J. 1999. *Study on the Development of Transboundary Natural Resource Management Areas in Southern Africa*. The Biodiversity Support Program, New York, USA. Available in several volumes from: <http://www.bsponline/publications/africa/transboundary/TBNRM.pdf>.
- Hamilton, L.S. 1996. Transborder protected area co-operation. In: J. Cerovský (Ed.), *Biodiversity Conservation in Transboundary Protected Areas in Europe*. pp. 9–18. Ecopoint, Prague, Czech Republic.
- Hamilton, L.S. 1997. Some observations on transborder protected area co-operation. In: D. Harmon (Ed.), *Making Protection Work*. The George Wright Society, Hancock, Michigan, USA.
- Hamilton, L.S., Mackay, J.C., Worboys, G.L., Jones, R.A. and Manson, G.B. 1996. Transborder Protected Area Co-operation. IUCN, Gland, Switzerland and Australian Alps Liaison Committee, Canberra, Australia.
- Hockings, M., Stolton, S. and Dudley, N. 2000. *Evaluating effectiveness: A framework for assessing the management of protected areas*. IUCN, Gland, Switzerland and Cambridge, UK.
- International Maritime Organisation. 1995. *Manual on Oil Pollution, Section II Contingency Planning*. IMO Publication IMO 560. Can be ordered from the IMO. See <http://www.imo.org/pubs/pubcat6.htm>.
- IUCN. 1994. *Parks for Life: action for protected areas in Europe*. IUCN, Gland, Switzerland.
- IUCN. 1994a. *Guidelines for protected area management categories*. CNPPA with the assistance of WCMC. IUCN, Gland, Switzerland and Cambridge, UK.
- IUCN/SSC. 1995. *Guidelines for Re-introductions*. Prepared by the IUCN Species Survival Commission's Reintroduction Specialist Group. <http://www.iucn.org/themes/ssc/pubs/policy/reinte.htm>.
- IUCN/WCPA. 1997. Special Issue on Parks for Peace. *Parks* 7(3):1–56, 6 articles.
- IUCN/WCPA. 1998. Transboundary Protected Areas as a Vehicle for International Co-operation. Proceedings, Parks for Peace Conference, Somerset West, South Africa, September 16–18, 1997. http://www.unep-wcmc.org/protected_areas/transboundary/somersetwest/index.html.
- Kelleher, G. 1999. *Guidelines for marine protected areas*. IUCN, Gland, Switzerland and Cambridge, UK.
- Kothari, A., Singh, N. and Saloni, S. (Eds.). 1996. *People and Protected Areas: Towards Participatory Conservation in India*. Sage Publications, New Delhi, India.
- Lewis, C. (Ed.). 1996. *Managing Conflicts in Protected Areas*. IUCN, Gland, Switzerland.
- McNeely, J.A. (Ed.) 1995. *Expanding Partnerships in Conservation*. Island Press, Washington DC, USA.
- Shine, C., Williams, N. and Gündling, L. 2000. *A Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species*. Environmental Policy and Law Paper No 40. IUCN, Gland, Switzerland and Cambridge, UK in collaboration with IUCN Environmental Law Centre, Bonn, Germany.
- Stevens, S. (Ed.) 1997. *Conservation through Cultural Survival*. Island Press, Washington DC, USA.

- Stolton, S. and Dudley, N. (Eds.). 1999. *Partnerships for Protection*. Earthscan, London, UK.
- Thorsell, J. (Ed.). 1990. *Parks on the Borderline: Experience in Transfrontier Conservation*. IUCN, Gland, Switzerland.
- UNEP, WCMC and WCPA. Protected Areas Programme, Transboundary Protected Areas. http://www.unep-wcmc.org/protected_areas/transboundary/index.html
- UNESCO. 2000. MAB Seville +5 Recommendations for the establishment and functioning of Transboundary Biosphere Reserves. <http://www.unesco.org/mab/mabicc/2000/eng/TBREng.htm>.
- United Nations. 2000. Report of the Panel on United Nations Peace Operations (The Brahini Report). UN document A/55/305, S/2000/809.
- United Nations. 2000. Millennium Report of the Secretary-General of the United Nations. UN document A/54/2000. <http://www.un.org/millennium/sg/report/full.htm>.
- UNHCR, 1996. Guidelines on prevention of environmental impacts related to refugees operations. Developed by the United Nations High Commissioner for Refugees. <http://www.unhcr.ch/environ/pubs.htm>
- Warner, M. 2000. Conflict management in community-based natural resource projects: Experiences from Fiji and Papua New Guinea. Working Paper 135, Overseas Development Institute. <http://www.odi.org.uk/publications/wp135.pdf>
- Weed, T. 1994–1995. Central America's 'Peace Parks' and Regional Conflict Resolution. *International Environmental Affairs* **6(2)**:175–190.
- Wells, M. and K. Brandon with L. Hannah, 1992. *People and Parks: Linking Protected Area Management with Local Communities*. World Bank, WWF, USAID, Washington DC, USA.
- Westing, A.H. 1993. (Ed.). *Transfrontier Reserves for Peace and Nature: a Contribution to Human Security*. United Nations Environment Programme, Nairobi, Kenya.
- Westing, A.H. 1998. Establishment and management of transfrontier reserves for conflict prevention and confidence building. *Environmental Conservation* **25(2)**: 91–94.
- Westing, A.H. 1998–1999. Transfrontier reserve for peace and nature on the Korean peninsula. *International Environmental Affairs* **10(1)**: 8–17.
- Zbicz, D.C. 1999a. Transboundary Co-operation in Conservation: A global survey of factors influencing co-operation between internationally adjoining protected areas. Ph.D. dissertation, Duke University.
- Zbicz, D.C. 1999b. Transboundary co-operation between internationally adjoining protected areas. In: D. Harmon (Ed.), *On the frontiers of conservation*. pp.199–204. George Wright Society, Hancock, Michigan, USA.
- Zbicz, D.C. and Green, M. 1997. Status of the world's transfrontier protected areas. In: IUCN/WCPA. 1998. Transboundary Protected Areas as a Vehicle for International Co-operation. Proceedings, Parks for Peace Conference, Somerset West, South Africa, September 16–18, 1997.



Many transboundary protected areas are being set up in countries around the world. They can help strengthen regional co-operation for biodiversity conservation, conflict resolution and sustainable development.

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