Parliament of the Commonwealth of Australia

Biodiversity

The Role of Protected Areas

Report of the House of Representatives
Standing Committee on Environment, Recreation and the Arts

January 1993

Australian Government Publishing Service
Canberra

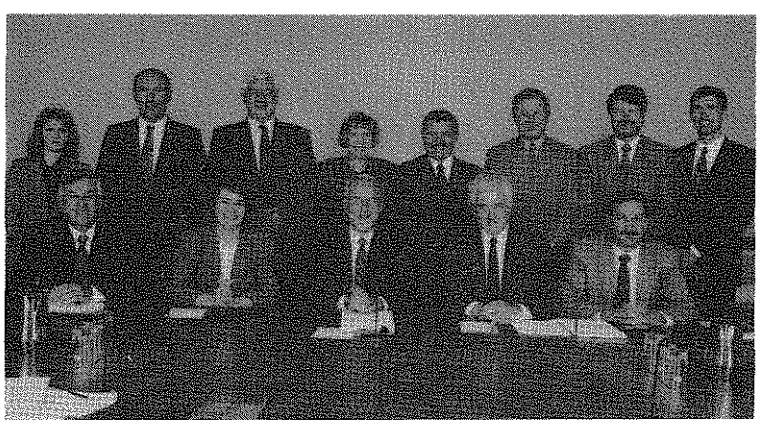
ISBN 0 644 28668 7

Photographs: opposite by David Foote and page 5 by Gary Hanson.
AUSPIC, the Government Photographic Service, Canberra

Printed in Australia by A. J. LAW, Commonwealth Government Printer, Canberra

MEMBERSHIP OF THE COMMITTEE

Chair	Mr J V Langmore, MP
Deputy Chair	Mr A P Webster, MP
Members	Hon. J D M Dobie, MP Mr S C Dubois, MP Mr R F Edwards, MP Mr P S Fisher, MP Mrs C A Gallus, MP Mr G Gear, MP Mr H A Jenkins, MP Mr N J Newell, MP Mr J L Scott, MP Mr W E Truss, MP
Committee Secretary	Ms L Smith
Inquiry Officer	Dr D J Brunckhorst
Administrative Officer	Mrs M Lyons
Administrative Officer	Mrs D Singleton



Seated: Mr Fisher, Ms Smith, Mr Langmore, Mr Webster, Mr Newell
Standing: Mrs Lyons, Mr Truss, Mr Dobie, Mrs Gallus, Mr Scott, Mr Gear, Mr Jenkins, Dr Brunckhorst

TERMS OF REFERENCE

The adequacy of Australia's current system of terrestrial parks and reserves to sustain biodiversity and adaptive evolutionary processes, with particular reference to:

- The relationship of protected areas to wildlife corridors, remnant and rehabilitated habitats, and other areas which occur outside protected areas.

- Public participation in the planning and management of protected areas.

- The role of Aboriginal and other indigenous communities, their land and their traditional knowledge, in protected area and biodiversity management.

- The interactive role of the Commonwealth, States and Territories in nature conservation.

CONTENTS

ABBREVIATIONS

ACF	Australian Conservation Foundation
ANPWS	Australian National Parks and Wildlife Service
ANZECC	Australian and New Zealand Environment and Conservation Council
ATSIC	Aboriginal and Torres Strait Islander Commission
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DASET	Department of the Arts, Sport, the Environment and Territories
DPIE	Department of Primary Industries and Energy
ERA Committee	House of Representatives Standing Committee on Environment, Recreation and the Arts
ERIN	Environmental Resources Information Network
ESD	Ecologically Sustainable Development
ESP	The Endangered Species Program
GIS	Geographic Information System
IGAE	Inter governmental Agreement on the Environment
IUCN	International Union for the Conservation of Nature
SCAP	States Cooperative Assistance Program
STB	Save the Bush Program
UNEP	United Nations Environment Program
UNESCO	*United Nations Environment, Scientific and* Cultural Organisation
WRI	World Resources Institute
WWF	World Wide Fund for Nature

PREFACE

This report on the role of protected areas in the maintenance of biodiversity is particularly important. Only a glance at a map of Australia's protected areas is necessary to appreciate the inadequacies of Australia's nature conservation reserve system. For although some ecosystems are fairly well represented, there are gaping holes: others are not represented at all or are severely under represented.

The purpose of this inquiry was to prepare a strategy for the establishment of a comprehensive, representative system of nature conservation reserves adequate to ensure the survival of most ecosystems and of the species in them. In other words, our aim has been to propose specific policies and programs which would fill the gaping holes in Australia's reserve system.

Only recently have environmentalists begun to think systematically about preserving biodiversity. As the Committee's inquiry concluded, the Government announced in principle commitment to the goal of a national comprehensive representative system of protected areas. This report therefore concentrates on the scientific basis for planning such a system, on estimating and recommending the allocation of the resources required to establish and manage such a system, and on ways of ensuring community participation in all stages of that process.

Many people have assisted in the preparation of the report. Invaluable contributions were made by the organisations and individuals who prepared submissions and who took part in the discussion at the illuminating workshop. Many people helped in broadening Committee members' perspectives during the visits we made to existing and prospective protected areas.

Drafting of the workshop discussion paper and of the report were the major intellectual tasks of the inquiry and I want to acknowledge the thoughtfulness, rigour and imagination applied by Ms Lindy Smith, the Committee Secretary, and Dr David Brunckhorst, the Committee's Adviser, to that challenging task. It is possible that, with their help and that of several of the participants of the workshop, this report could move the process of policy formation about this vital issue further forward in Australia than in any other country.

I would also like to warmly thank Mrs Marlene Lyons and Mrs Di Singleton for their efficient and expert administrative support.

This will be the last report of the ERA Committee to which Mr Peter Fisher MP and Mr John Scott MP will contribute as members. Peter Fisher has been a member of the ERA Committee and its predecessors for 13 years. His commitment to sympathetic study of the complex issues involved in environmental policy and his cooperativeness, good sense and good humour have contributed in many ways to the effectiveness of the Committee and to the pleasure of membership. Although John Scott has only joined recently, his strong sense of principle has already made a mark in the Committee's discussions. Both members will be missed from what is surely one of the most cooperative parliamentary committees.

John Langmore
Committee Chair

RECOMMENDATIONS

This is the ERA Committee's second report into measures to sustain Australia's biological diversity. The Committee's first report, on its inquiry into the contribution of community-based programs to the maintenance of biodiversity, was completed in June 1992.

Throughout both inquiries, three fundamental elements emerged as essential for action to maintain biodiversity and ecological processes: a bioregional approach to planning; an ecologically representative reserve system; and community involvement. These elements are also components of the national ESD strategy to which all governments have agreed.

The Committee has been guided by these elements in making recommendations for a specific course of action which will lead to the better maintenance of biodiversity through the establishment of a much improved protected area system across the nation.

A bioregional framework for planning

(1) that the assessment of the environmental values of Commonwealth land in the Shoalwater Bay area, announced by the Prime Minister, be expanded to include an examination of the environmental and socio-economic features of the entire Shoalwater Bay bioregion in collaboration with the Queensland Government, and that this inquiry should be conducted by the Resource Assessment Commission. *(paragraph 1.10)*

(2) that ANZECC develop and promulgate agreed protocols and guidelines for the identification of bioregions on a nationwide basis as a matter of urgency. *(paragraph 2.11)*

(3) that the Commonwealth, through ANZECC, develop a complementary bioregional planning and management framework for marine conservation and the ecologically sustainable use of marine resources. *(paragraph 2.11)*

(4) that, in implementing a consistent intergovernmental approach to the identification of bioregions nationwide, ANZECC nominate ERIN as the agency responsible for developing, in close consultation with relevant Commonwealth and State/Territory agencies:

- standards for the collection and geocoding of point based data;
- standards for electronic data capture and data validation;

- guidelines to assist and maximise the flow of data between all levels of government;

- guidelines to encourage and assist the use of key attribute datasets, and explicit and repeatable methodologies; and

- guidelines for the establishment of coregistered, georeferenced sites for environmental monitoring. *(paragraph 2.26)*

(5) that ERIN, through the ANPWS, immediately be given an increase in resources of three additional staff and, in the 1993-94 financial year, ERIN's allocation be increased by $2.3 million to $4.6 million to:

- further improve the quality and extension of the network;

- develop guidelines and standards;

- increase efforts in data capture and validation; and

- provide support as necessary to State/Territory agencies in identifying and implementing a bioregional framework. *(paragraph 2.28)*

(6) that funding of an additional $1 million over three years be provided to the CSIRO to establish an ALTERM pilot program. Establishment of the pilot program should provide the means to assess, after three years:

- the capacity to draw upon and supplement existing monitoring across all levels of landuse;

- the capacity to draw upon and support existing field research stations of universities, museums and similar institutions, and their existing research and monitoring programs;

- the capacity of the program to assist the development of a range of environmental management performance indicators;

- long term environmental planning and management requirements of all levels of government;

- the potential contribution to global, national and bioregional state of the environment reporting; and

- the funding and resources required for an ongoing program. *(paragraph 2.41)*

An ecologically representative system of protected areas

(7) that, in setting up a core protected area system nationwide, the Commonwealth set as a minimum target the representation of at least 80% of bioregional ecosystems in core protected areas by the turn of the century. *(paragraph 3.28)*

(8) that ANZECC establish a small specific purpose task force to facilitate, through a bioregional framework, the identification, development and consolidation of a nationwide system of ecologically representative protected areas. *(paragraph 3.45)*

(9) that the task force proposed in Recommendation 8 take on the responsibilities envisaged for the ANZECC forestry working group as a part of its task in consolidating a nationwide system of ecologically representative protected areas. *(paragraph 3.47)*

(10) that the Commonwealth provide $100 million over 6 years to establish a tied grants program specifically for the purpose of the acquisition of identified areas to consolidate the establishment of a nationwide system of ecologically representative core protected areas. The acquisition program would be administered in accordance with the conditions specified below.

- The States and Territories would be required to contribute a total of $50 million over the six year program, to match the Commonwealth funds on a 2:1 basis, so as to provide a total of $150 million over the 6 year program.

- The ANPWS would administer the Commonwealth funds and provide secretariat support and advice to the task force.

- The ANZECC task force would assess funding applications on the basis of specific protocols which might include:

  - a commitment of one third of required funds by the relevant State/Territory;

  - the adequacy of the bioregional framework;

  - the adequacy of scientific method in identifying bioregional networks of reserves in accordance with the principles of complementarity, flexibility and irreplaceability; and

  - agreement by the State/Territory agency to the development of an appropriate management plan within 18 months of acquisition, after meaningful public consultation. *(paragraph 3.57)*

(11) that the Commonwealth increase funding for the States Cooperative Assistance Program to $4 million to:

- provide increased resources to the current program;
- establish a subprogram specifically to upgrade the management and protection of existing reserves that are not currently core protected areas but whose enhanced protection has been identified as important to the creation of a representative bioregional network of protected areas; and
- fund other management projects. *(paragraph 3.72)*

(12) that, in conjunction with the tied grants program for acquisition of protected areas (Recommendation 10), the Commonwealth provide $50 million over 6 years to establish a tied grants program specifically to meet the management costs of establishing new reserves. In addition:

- the ANPWS should administer the protected areas establishment management program;
- the ANZECC task force and the ANPWS should closely assess the establishment costs, as proposed by State/Territory agencies, on a case by case basis;
- strict accountability and detailed expenditure statements should be required of the State/Territory agencies; and
- the States/Territories should be required to show their capacity to meet most, if not all, ongoing management requirements. *(paragraph 3.76)*

(13) that the ANZECC task force and ANPWS work to establish a consistent nomenclature and classification for Australia's protected areas. In doing so they should:

- build on the existing work of the ANPWS in classifying the current reserve system against IUCN categories;
- minimise unnecessary changes or confusion;
- complete the project nationwide by 1998. *(paragraph 3.90)*

(14) that an annual national conference on protected area assessment, planning and management be held. The ANPWS could host the conference in the first year; thereafter State and Territory agencies could take turns in hosting the conference. *(paragraph 3.94)*

Community involvement

(15) that the principles for community consultation which appear in the ESD strategy be incorporated into the national biodiversity strategy. *(paragraph 4.39)*

(16) that the Commonwealth offer to fund the salary and salary-related costs of bioregional facilitators for biodiversity and ESD initiatives, on the condition that other governments meet the remainder of the costs, for an initial period of three years, after which the arrangement would be reviewed. *(paragraph 4.44)*

(17) that the ANPWS Aboriginal Recruitment, Training and Career Development Strategy, and similar strategies which the ANPWS develops in conjunction with State and Territory conservation agencies, contain measurable objectives and specify a process of evaluation and review which includes the participation of Aboriginal and Torres Strait Islander people. *(paragraph 4.63)*

(18) that Recommended Action 6.1.7 of the draft national biodiversity strategy be revised to reflect the complexity and sensitivity of seeking to identify and use traditional Aboriginal and Torres Strait Islander knowledge and practices in biodiversity research and conservation. *(paragraph 4.71)*

(19) that the Commonwealth seek the support of ANZECC to a policy framework for negotiations between indigenous people and conservation management agencies concerning the management of protected areas, based on Recommendation 315 of the Report of the Royal Commission into Aboriginal Deaths in Custody. *(paragraph 4.91)*

(20) that management plans developed for national parks funded under the acquisition and establishment programs for a nationwide ecologically representative core protected area system (recommendations 10 and 12) be required to include provision for the preservation of sites of ritual or spiritual significance to Aboriginal and Torres Strait Islander people where these sites occur in identified core protected areas. *(paragraph 4.94)*

(21) that either greater weight be given in the CEPANCRM program to conservation management as a goal, or a separate traditional owners' conservation assistance program be established. *(paragraph 4.106)*

(22) that the Commonwealth make a commitment to implement the model of community consultation developed by the Aboriginal Programs Section of the ANPWS by:

- forming a task force of Commonwealth agencies which administer relevant land management and conservation programs to develop and establish the model, and to act in due course as the Commonwealth representatives on the joint federal committee;

- providing funds to promote the concept nationally; and

- approaching the States and Territories with a view to adopting the model on a trial basis in one or two States/Territories in 1993-1994, with full implementation if appropriate the following year. *(paragraph 4.110)*

CHAPTER 1: INTRODUCTION

We did not weave the web of life: we are merely a strand in it. Whatever we do to the web, we do to ourselves.

Chief Seattle, 1854.

Background

1.1 Conserving the variety of life on earth and sustaining ecological systems, the 'web of life', is an important issue both internationally and nationally.

1.2 On 5 June 1992, Australia joined 153 other nations in signing the *Convention on Biological Diversity*, thereby making a commitment to work to ensure the long term maintenance of biodiversity. Within Australia, the Commonwealth Government, and the governments of all States and Territories, had already signed the *Intergovernmental Agreement on the Environment* (IGAE), in which they formally recognised that 'biological diversity is a major and valuable component of the environment and should be protected'.[1] In December 1992, they all agreed to implement a *National Strategy for Ecologically Sustainable Development*, one of the core objectives of which is 'to protect biological diversity and maintain essential ecological processes and life support systems'.[2]

1.3 Conserving biodiversity requires a combination of measures, the most significant of which are those which promote *in situ* conservation, both within and outside protected areas. The obligations for *in situ* conservation to which the signatories of the *Convention on Biological Diversity* have agreed appear at Article 8 of the convention. They are reproduced at Appendix A to this report.

1.4 A *National Strategy for the Conservation of Australia's Biological Diversity* has been drafted by the Biological Diversity Advisory Committee which was established for this purpose by the Minister for the Arts, Sport, the Environment and Territories, the Hon. Ros Kelly MP, but the strategy has not yet been finalised and adopted by governments. While the national biodiversity strategy will reflect the measures proposed in Article 8 of the international biodiversity convention, the maintenance of biodiversity in Australia will be affected also by the suite of associated environmental strategies, policies and plans which are emerging as governments tackle the many related issues.

---

1 *Intergovernmental Agreement on the Environment*, February 1992, Schedule 6.

2 *National Strategy for Ecologically Sustainable Development*, December 1992, p.4.

Recent policy initiatives which will have a major impact on biodiversity are the Ecologically Sustainable Development (ESD) strategy, the *National Forest Policy Statement*, and the Prime Minister's December 1992 *Statement on the Environment*.

1.5 This is the second inquiry by the House of Representatives Standing Committee on Environment, Recreation and the Arts (the ERA Committee) into the conservation of biodiversity. The first inquiry, which focussed on *in situ* conservation measures outside protected areas, investigated the role of existing community initiatives. The Committee presented its report, *Biodiversity: The Contribution of Community-based Programs*, to the Parliament on 25 June 1992. On 1 June 1992, the Hon. Ros Kelly MP agreed to the Committee's proposal to undertake the current inquiry: an examination of the role of protected areas in the maintenance of biodiversity. The terms of reference require the Committee to assess the adequacy of Australia's current system of terrestrial parks and reserves.

1.6 While the Commonwealth Government has not yet formally responded to the first report, a number of subsequent changes to government policies and programs have reflected the Committee's findings and recommendations. The Government's commitment to establish a marine and coastal community network in 1993, as announced in the Prime Minister's *Statement on the Environment*, accords with the Committee's recommendation to implement a community-based marine and coastal program. The Committee is also pleased that the environment statement recognises the need for environmental initiatives to be planned and managed within a strategic bioregional framework. Such an approach is required right across the continent, the coastal zone and Australia's marine province, and is also conducive to the achievement of ecologically sustainable development. As the recommendations of the first report are of direct relevance to the issues encompassed in the current inquiry, they appear at Appendix B to this report.

1.7 The extent and pace of policy development concerning environmental issues has been such that the Commonwealth Government has already acted on a number of the issues which were raised and pursued during the current inquiry. On 9 October 1992, the Committee hosted a workshop on the establishment of a national system of ecologically representative areas. The workshop, and the discussion paper which the Committee prepared for the occasion, explored ideas about which some decisions have since been made. These included:

- the adoption of a bioregional approach to the assessment of protected areas (*Statement on the Environment; National Forest Policy Statement*)

- the provision of Commonwealth assistance in the acquisition and management of protected areas (*Statement on the Environment; National Forest Policy Statement*)

- the encouragement of consistent management principles in protected areas (*Statement on the Environment; National Strategy for Ecologically Sustainable Development*)

- recognition of the connection between protected areas and the ecologically sustainable use of resources (*Statement on the Environment; National Strategy for Ecologically Sustainable Development; National Forest Policy Statement*)

- the need for long term monitoring and environmental reporting (*Statement on the Environment)*

- recognition of the value of public participation in the management of protected areas (*Statement on the Environment; National Strategy for Ecologically Sustainable Development; National Forest Policy Statement*)

- recognition of the potentially important contribution that the traditional knowledge and practices of indigenous people can make to the management of protected areas (*Statement on the Environment).*

1.8 The Committee played a key role in building support for the proposal that the government provide funding towards the purchase of Calperum pastoral lease near Renmark, South Australia. The Committee was aware of a suggestion that the Calperum lease, which adjoins Danggali biosphere reserve, be acquired as a means of developing a model for the integration of nature conservation and ecologically sustainable development though community involvement, in accordance with the principles of the UNESCO biosphere reserve program. The Committee also recognised benefits to the conservation of biodiversity across the mallee lands. Having received briefings and submissions on the proposal, and having visited the region in October 1992, the Committee pursued the concept with the Prime Minister and relevant Ministers, pointing out that the acquisition of the Calperum lease would create a crescent of continuous national parks and reserves extending through the semi-arid mallee regions of South Australia, Victoria and New South Wales. Supporters of the Chicago Zoological Society are donating one-third of the purchase price of the property. The Committee congratulates the Commonwealth, relevant State governments, and local communities for supporting this proposal.

1.9 Another issue pursued by the ERA Committee during the current inquiry was the significance of the Shoalwater Bay area of Queensland to the conservation of biodiversity and the sustainable use of resources. The Comittee visited the area on 23 September 1992 and spoke with a broad range of people from the local community who are deeply concerned about the future of the area. The Chair of the Committee wrote to several Ministers proposing that a full inquiry be held to assess the area and its environmental significance. The Prime Minister has announced that an assessment of the environmental and economic values of the Commonwealth land in the region will be conducted. However, the Committee believes the inquiry should look at the whole range of resource and environmental issues for the entire region.

1.10 Therefore the Committee recommends:

(1) that the assessment of the environmental values of Commonwealth land in the Shoalwater Bay area, announced by the Prime Minister, be expanded to include an examination of the environmental and socio-economic features of the entire Shoalwater Bay bioregion in collaboration with the Queensland Government, and that this inquiry should be conducted by the Resouce Assessment Commission.

Calperum Acquisition[3]

The Government will provide $1.2 million in the present financial year towards acquisition of the 240,000 hectare Calperum pastoral lease, near Renmark in South Australia. We recognise that some property acquisitions can contribute substantially to nature conservation and the fulfilment of Ecologically Sustainable Development objectives and practices.

This purchase will connect existing reserves to provide a crescent of 1.3 million hectares managed as a UNESCO Biosphere Reserve.

Through funding support both in Australia and from overseas, and management by a Development Trust currently running the adjoining property, Chowilla Regional Reserve, this area can provide a model for conservation and ecologically sustainable land use. It is also a model for cooperation between governments and within the community.

The Trust will manage the protection and rehabilitation of the environmentally significant areas of the land, including some ancestral flood plains of the Murray River catchment, registered under the Ramsar Convention to protect wetlands as being of international significance.

The Inquiry

1.11 The ERA Committee inquiry was advertised nationally in all capital cities and regional centres on 13 June 1992, and in a number of regional localities and special interest publications during the following week. Ninety-one submissions were received, including a number of substantial papers from scientific institutions, conservation groups, industry representatives, government agencies and individuals with relevant expertise. A list of submissions is at Appendix C. The Committee held a series of informal briefings, discussions and inspections between June and November 1992, as shown at Appendix D.

3 *Statement on the Environment*, Prime Minister, 21 December 1992, p. 23.

The Committee's workshop on protected areas, 9 October 1992

1.12 The Committee's workshop, mentioned above, focussed on the mechanisms required to establish a national system of ecologically representative protected areas. The Committee invited participants who represented a broad range of interests and expertise, yet it also limited the number of people attending in order to encourage maximum interaction among those present. The people who attended the workshop included: scientists, academics, State and Territory nature conservation agency representatives, conservation planners, local government planners, conservation groups, representatives of Aboriginal people and representatives from various industry organisations. The workshop program is reproduced at Appendix E and a list of participants is at Appendix F. Some workshop participants subsequently provided the Committee with additional written information and comments.

Essential elements of nationwide action

1.13 While a variety of factors are necessary for the successful implementation of a plan of action to ensure the maintenance and sustainable use of Australia's biological diversity, three elements in particular were repeatedly identified to the Committee as fundamental: a bioregional framework for planning, an ecologically representative reserve system, and community involvement. These elements feature in the ESD strategy and the forest policy statement and, as such, have now been acknowledged by all governments.

A bioregional framework for planning

1.14 There is strong and widespread agreement to the view that a bioregional framework must be established across the continent for the planning and management of all land and resource use, including natural resource and conservation programs.

1.15 Evidence presented to the Committee during its last inquiry led it to recommend that:

> a bioregional framework be established across the continent for the planning and management of all environmental and natural resource programs. The bioregions should be established through collaboration with all levels of government.[4]

1.16 Considerable support for this recommendation has been expressed in correspondence and in many submissions to the Committee's current inquiry.[5] These include submissions from State and local governments, environment groups, and mining, forestry and rural industry representatives. Other current policy planning fora have now recognised the need for regional planning, as evidenced by the ESD strategy and the forest policy statement. However, none have developed mechanisms for implementation.

---

4 *Biodiversity: The Contribution of Community-based Programs*, Report of the House of Representatives Standing Committee on Environment, Recreation and the Arts, June 1992, Recommendation No. 17, p. 40.

5 For example, *Submissions* Nos. 5, 9, 16, 20, 22, 23, 24, 27, 32, 43, 44, 48, 50, 53, 57, 64, 65, 66, 82, 83, 89.

1.17 There was agreement at the Committee's workshop that, while identified bioregions should not be considered as representing an absolute truth about the environment, they are valuable in providing a scientifically credible and logically consistent way of establishing frameworks for regional planning and for developing integrated environmental policies and strategies.

1.18 The Committee considers that all of the current and proposed strategies should be implemented on a bioregional basis, including the strategies for ESD, biodiversity, forestry, tourism and Australia's coastline. It is vital that they be implemented in a consistent and complementary way. A bioregional approach provides the necessary framework for the integration and coordination of all land and resource uses across jurisdictional boundaries, and it allows for local communities and other key stakeholders to be involved in working towards ecologically sustainable development.

An ecologically representative system of protected areas

1.19 It is generally recognised that maintaining biodiversity in terrestrial and marine environments will depend on the success of a variety of measures to protect and manage, in an ecologically sustainable way, habitats and species which exist outside formal conservation reserves. However, an essential feature of any strategy to maintain biodiversity is a system of protected areas, which should be designed and managed to represent and protect the diversity of ecological communities, species and gene pools.[6]

1.20 Within Australia, recognition of the need for a representative system of protected areas dates back over 25 years, as summarised in the Committee's workshop discussion paper. All governments have now agreed to the need to establish an ecologically representative system of protected areas, as stated in the IGAE, the ESD strategy and the *National Forest Policy Statement.* In addition, the *Statement on the Environment* commits the Commonwealth to assisting the States in establishing a protected area system. However, the mechanisms to achieve this objective have not been identified.

Community participation

1.21 The important contribution being made by local people to conserve biodiversity outside formal national parks and nature reserves has increased in recent years and will need to continue to grow. Public awareness and community-based action are critical to the conservation of Australia's biodiversity and ecologically sustainable development.[7]

1.22 The advantages to protected area managers of consulting with the community are clearly evident when indigenous people are given the opportunity to participate in land management decisions.[8] The 'caring for country' values held by Aboriginal people reflect their long and complex spiritual and cultural relationship with the Australian

---

6 *Global Biodiversity Strategy,* WRI/IUCN/UNEP, 1992.

7 *Biodiversity: The Contribution of Community-based Programs.*

8 *Aboriginal Involvement in Parks and Protected Areas,* Australian Institute of Aboriginal and Torres Strait Islander Studies Report Series, 1992.

landscape. Furthermore, it is only recently that European scientists have recognised the significant traditional knowledge of Aboriginal people and have sought to utilise it in environmental management.[9]

1.23 Public participation in the planning, management and support of protected areas is increasingly being viewed by governments as necessary to meet environmental objectives. It is also being increasingly demanded by the public.

1.24 It is now necessary to put these principles into practice.

Essential Elements for Action to Sustain Biodiversity and Ecological Processes

Element 1

The maintenance of biological diversity and ecological processes depends upon a combination of measures within and outside reserves, which is best achieved through a bioregional framework for landuse assessment, planning and management.

Element 2

A nationwide system of ecologically representative, core protected areas is an essential element in any strategy to conserve biodiversity. The core protected area system should comprise areas which together represent the variety of Australia's ecosystems and species assemblages.

- The areas which are currently reserved do not adequately represent Australia's biological diversity.

- There is broad agreement nationally that a number of identified ecological communities are in critical need of appropriate protective action to ensure their preservation. In addition it is necessary to identify sets of complementary core protected areas at the bioregional level if an efficient nationwide representative system is to be achieved.

Element 3

A proportion of biological diversity will always remain outside a reserve system. Community support and action is essential for the maintenance of biodiversity and the sustainable use of natural resources across all land tenures within bioregions. Therefore, local people should be involved in conservation activities across the landscape, both within and outside core protected areas.

---

9 *Submissions* Nos. 8, 10, 52, 53, 65; D Carter, *Workshop*, Canberra, 9 October, 1992; 'Uluru - Linking Science and Traditional Knowledge', *Ecos* No. 71, Autumn 1992, pp. 6-13.

CHAPTER 2: IMPLEMENTING BIOREGIONAL PLANNING

For effective conservation of Australia's biodiversity, the task is to operationalise the National Strategy.

... The aim, therefore, is to produce a continental scale map with corresponding State and regional and even local maps at finer scales which, based on our present understanding, represents the best possible combination of the set of reserves and other areas aimed at conserving biodiversity.

Dr Brian Walker, CSIRO.[1]

Intergovernmental arrangements

2.1 A bioregion is a large area of interrelated environmental attributes and ecosystems. A bioregional planning framework allows for the variously defined and tenured areas of land or sea within a bioregion to be managed in a complementary way to achieve nature conservation and human lifestyle objectives in the long term.

2.2 Adoption of a bioregional framework is essential to the implementation and coordination of national ESD and biodiversity strategies. To be effective and complementary, other strategies such as those for forest use, endangered species and threatened habitats, weeds and vertebrate pests, and the Decade of Landcare program should also be implemented within such a framework.

2.3 During the course of the current inquiry, throughout inspections, briefings, the workshop and in many submissions, the Committee has received tremendous support for its previous recommendation that a bioregional planning and management framework be established nationwide. This requirement has been reiterated to members in the context of establishing an ecologically representative system of protected areas. It is also necessary for the sustainable use of natural resources, and the ecologically sustainable development of mining and other extractive industries.

2.4 The submission from BHP, for example, argues that:

> Protected areas should no longer be considered as islands of conservation within a sea of development but as an integral part of each region as a whole in terms of biodiversity conservation.[2]

---

1 Plenary address, Fenner Conference on the draft national biodiversity strategy, 10-13 March 1992.

2 *Submission* No. 20, p. 1.

2.5 Therefore, the Committee welcomes the Prime Minister's announcement, in the Environment Statement, that a bioregional approach to the identification of protected areas would be developed. The mechanisms to do so, however, are not spelt out in the Statement. This report makes further specific recommendations to implement the necessary bioregional approach. It is essential for the establishment of an ecologically representative protected area system nationwide, and for off-reserve conservation measures which consider the regional context of all landuses. A concurrent bioregional approach is also required for Australia's coastal and marine provinces.

Purposes of a Bioregional Framework[3]

1. To develop a systematic basis for understanding and recognising inherent biodiversity in each region.

2. To enable environmental auditing of each region to determine the conservation status of biodiversity threatening processes, sustainability of landuse and socio-economic issues, so as to focus and prioritise conservation planning in this country.

3. To develop regional conservation strategies that integrate a representative reserve system with off reserve measures and ecologically sustainable development

2.6 Cooperation and complementary implementation across all levels of government are necessary for environmental planning and management on a bioregional basis. The submission from the Department of the Arts, Sport, the Environment and Territories states:

> One of the major determinants of the success of bioregional planning will be the extent to which all levels of government cooperate and coordinate their activities. For this to occur a concerted nationwide effort will be required to establish better lines of communication and coordination mechanisms which can be activated as soon as appropriate bioregional boundaries have been determined and accepted.[4]

2.7 Under the Intergovernmental Agreement on the Environment, the Australian and New Zealand Environment and Conservation Council (ANZECC) is the primary forum for the coordination of national nature conservation functions.[5] This was acknowledged in submissions received from the States and Territories and was endorsed by participants at the workshop hosted by the ERA Committee.

---

3 P Sattler, *Workshop*, Canberra, 9 October 1992.

4 *Submission* No. 82, p. 4.

5 IGAE, Article 9, paragraph 16, p. 39; *Submissions* Nos. 65, 71, 82.

2.8 In addition, the IGAE recognises the role of the Commonwealth in the coordination of cooperative programs:

> The Commonwealth ... has particular interest in facilitating the effective and efficient coordination of nature conservation across all jurisdictions.
>
> ... The Commonwealth has a responsibility ... to assist the States with common concerns which have been identified by the Commonwealth and the States to have national implications.[6]

2.9 Whilst ANZECC plays a leading role in such coordination and cooperation, several submissions say that the ANZECC decision making procedure, which requires the agreement of all parties, waters down all decision making to the level of the most dissenting State/Territory. It has been suggested that implementation of a 75% majority rule, that is if all but two members agree, might resolve this weakness.[7]

2.10 The Queensland Government's submission says that the interaction between governments will become more conducive to the conservation of biodiversity provided that:

- there is strict adherence to the clauses of the IGAE;
- ANZECC continues to develop itself as the primary medium for discussion and resolution of environmental issues;
- national policies/strategies pertaining to conservation are developed by the Commonwealth and States and Territories as equal partners; and
- there is Commonwealth recognition of the limitations on State treasuries.[8]

2.11 To immediately facilitate the identification of bioregions across all Australian land and waters the Committee makes the following recommendations:

> (2) **that ANZECC develop and promulgate agreed protocols and guidelines for the identification of bioregions on a nationwide basis as a matter of urgency.**
>
> (3) **that the Commonwealth, through ANZECC, develop a complementary bioregional planning and management framework for marine conservation and the ecologically sustainable use of marine resources.**

2.12 The Committee notes that Papua New Guinea and Indonesia are not members of ANZECC and suggests that it might be desirable to include our close neighbours in discussions about the establishment of marine bioregions.

---

6 IGAE, Section 2.
7 *Submissions* Nos. 2, 4, 12, 27, 62, 75.
8 *Submission* No. 71.

Establishing the framework

2.13 The Committee is greatly impressed by the progress made by the Environmental Resources Information Network (ERIN) unit of the Australian National Parks and Wildlife Service (ANPWS).[9] The work and further potential of ERIN in providing a national environmental information system was also endorsed by the ESD Standing Committee and in submissions to the inquiry.[10]

The Principles behind the ERIN Program[11]

1. Environmental information should be available through a network so that access is possible at the point where the information is required, rather than through a bureau-type service. This will result in a more rapid and effective transfer of knowledge about data and information to decision makers. In turn, there would be a far more efficient decision making process than presently exists, and corporate memory would be developed.

2. The data should be stored on a network of computers, rather than on a central system, so that creators of a particular dataset could update and maintain it. Data should be immediately available on the network following updates.

3. A wide variety of data types should be accessible through an easy-to-use interface incorporating a comprehensive directory facility. This would simplify the decision making and planning process.

4. Modelling and analytical tools should be available through the same interface as that giving access to data.

5. Every effort must be made to acquire and store primary, rather than aggregated, data so that conclusions based on those data can be properly understood and rigorously reviewed, and so that baselines for monitoring are established. Original site data are the key to liberation from scale-dependent notions which have limited the utility of paper maps in modelling and analysis. This principle should be reflected in agreements with, and grants to, external agencies for the collection of data.

6. Planning, research, development and management in relation to environmental information must be based on established and well organised interdisciplinary and multi-agency collaboration and cooperation.

7. There should be easy access to data at minimum charges and without unnecessary administrative and other arbitrary encumbrances which would impede responsible environmental decision making.

---

9 *Inspections,* Canberra, 11 August 1992; *Workshop,* Canberra, 9 October 1992.

10 For example, *Submissions* Nos. 5, 23, 27, 48, 53, 75, 82, 89.

11 *ERIN - An overview,* June 1992, pp. 1-2.

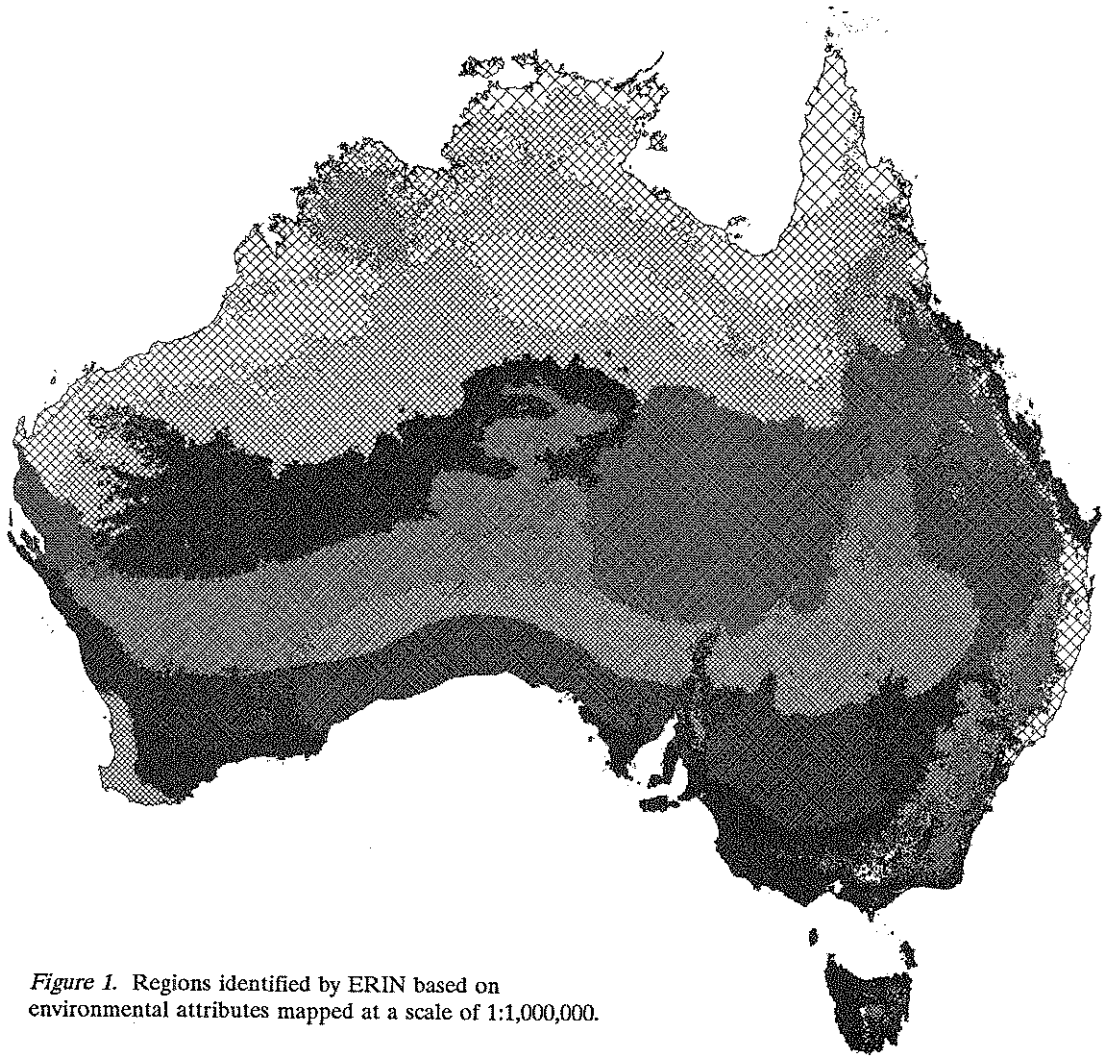


Figure 1. Regions identified by ERIN based on environmental attributes mapped at a scale of 1:1,000,000.

2.14 The ERA Committee commends the approach taken by ERIN in the collaborative and logical way the information system is being developed. Rather than creating a centralised dataset, ERIN is establishing a network of users and database custodians who are able to exchange accurate environmental and biological data in accordance with the IGAE. The success of an integrated national network of datasets for environmental classification and monitoring rests with the various custodian agencies. The Commonwealth, through ERIN, facilitates priority setting, and provides context, coordination and integration of datasets as a network.

2.15 Considerable progress has been made by ERIN in the development of continental and broad regional scale (e.g. Murray-Darling Basin) environmental classifications. Nevertheless, the State and Territory agencies contribute much of the resources and datasets to regional scale mapping.[12] For example, the Queensland Department of Environment and Heritage, with technical assistance from ERIN, has made considerable advances in the identification of biogeographic provinces and their inherent ecological communities.[13]

2.16 The nationwide 30 group regionalisation produced by ERIN was a quantum step in environmental classification of a continent using sophisticated geographic information systems (GIS). This follows the pioneering and ongoing work of Professor Henry Nix and coworkers. The ERIN regionalisation is reproduced at *Figure 1* as an example of identified bioregions using 'state of the art' technology and data networking. The continental scale regionalisation provides a valuable overview, across all of Australia, which describes the general organisation of the Australian environment.

2.17 Such large scale mapping as used in the ERIN regionalisation (i.e. 1:1,000,000), however, is acknowledged to be insufficient for conservation assessment at the smaller regional and local levels required for State and Territory bioregional assessments. Appraisal of the protection given to regional ecosystem and biological components also requires a finer scale of environmental mapping (e.g. 1:250,000).[14] Nonetheless, the ERIN initiatives have contributed essential prerequisites such as: direction for further technical development; context for the nationwide identification of bioregions; scientifically credible approaches; and explicit methodology. In addition, the work of ERIN has provided the vital development of data capture and validation techniques.

2.18 Maintaining a national view is important to a bioregional approach being developed within and across States and Territories by their respective agencies. In the words of Professor Kirkpatrick:

> ... if a bioregional approach is being used it would be appropriate to keep some sort of database at the central level which looked at the overall Australian level, treating Australia as the bioregion so to speak, and assessed the overall representation at the Australian level.[15]

---

12 *Submission* No. 65; *Inspections,* Canberra, 11 August 1992.

13 *Submissions* Nos. 71, 89; *Workshop,* Canberra, 9 October 1992.

14 *Submissions* Nos. 65, 75, 89; *Workshop,* 9 October 1992.

15 *Workshop,* Canberra, 9 October 1992.

2.19 Scientific experts and land managers point out that environmental regionalisations are not immovable, their borders generally being the averaged midpoint of a gradient of environmental and biological variables, and as new knowledge becomes available temporal and spatial flexibility is required.

2.20 It will be many decades yet before nationally comprehensive biological datasets are available. In the interim, recognising that key environmental attributes drive biological systems, the use of environmental diversity as an indicator of biological diversity is now far enough advanced for there to be no longer any reason to hold back from its use in bioregional assessment and planning.[16]

2.21 A workshop on environmental regionalisation, hosted by ERIN in May 1992, built further foundations for national consensus on procedures for generating environmental regionalisations. State and Territory and Commonwealth agencies present at that workshop agreed to a set of priority actions and the need for close collaboration particularly in relation to methodologies, national data standards and data sharing.[17] The findings and conclusions of the workshop have been communicated to the ANZECC Standing Committee.[18]

2.22 Several governments are now beginning the task of identifying bioregions, though they are at different stages of development. The ERA Committee warmly welcomes these initiatives and congratulates those responsible. Nevertheless, the Committee emphasises that close collaboration and consistency of approach (but not necessarily uniformity of method) must be ensured so that the bioregions are environmentally and administratively useful for conservation and landuse planning, but also complementary across governmental jurisdictions.

2.23 The Committee commends the Australian Heritage Commission on the development of regional assessment methods for assessing a wide range of national estate criteria.[19] The Committee believes these methods will be valuable in assessing national estate value, and subsequent listing and management of these sites, but notes that it is not sufficiently rigorous and explicit to assess regional biodiversity and ecosystems to identify efficient and representative regional reserve networks. The Commission's work includes the identification of wilderness. The Committee endorses the undertaking by the Prime Minister, in the Environment Statement, to complete the National Wilderness Inventory by 1993. This will assist the identification of protected areas.

2.24 Whilst there is some flexibility in methodologies, these must be scientifically credible, explicit and at an appropriate regional scale. The Committee accepts the advice from further discussions with ERIN scientific staff and experts in State and Territory agencies that mapping scales of 1:100,000 to 1:250,000 are appropriate and feasible at

---

16 *Submissions* Nos. 5, 16, 20, 23, 27, 44, 48, 53, 65, 71, 75, 86, 89; *Inspections,* Canberra, 11 August 1992; *Workshop,* Canberra, 9 October 1992.

17 *Environmental Regionalisation - Establishing a Systematic Basis for National and Regional Conservation Assessment and Planning,* Proceedings of an Australian Workshop, ANPWS, Canberra 11-12 May 1992.

18 *Submission* No. 65; J Busby, *Workshop,* Canberra, 9 October 1992.

19 *Submissions* Nos. 44, 86.

this level.[20] As, over the next 12 months, the Australian Surveying and Land Information Group will be releasing a new series of digitised maps at the 1:250,000 scale, and these will available for GIS applications. State and Territory agencies might prefer to use this scale. For detailed complementary local government planning at a smaller scale, within bioregions and built up areas, a mapping scale of 1:25,000 will be more appropriate.

2.25 The ANPWS through ERIN could provide technical advice, scientific coordination, and complementary mechanisms to provide consistency across State/Territory borders, as well as guidelines for data collection, geocoding, data validation, and environmental auditing from the national perspective.

2.26 The Committee recommends:

(4) that, in implementing a consistent intergovernmental approach to the identification of bioregions nationwide, ANZECC nominate ERIN as the agency responsible for developing, in close consultation with relevant Commonwealth and State/Territory agencies:

- standards for the collection and geocoding of point based data;
- standards for electronic data capture and data validation;
- guidelines to assist and maximise the flow of data between all levels of government;
- guidelines to encourage and assist the use of key attribute datasets, and explicit and repeatable methodologies; and
- guidelines for the establishment of coregistered, georeferenced sites for environmental monitoring.

2.27 The resources available to ERIN to perform its continuing and important developing role are minimal. An independent report of the ERIN pilot program in February 1992 recommended that funding be continued and markedly increased.[21] The ERIN Review Steering Committee considered that, while ERIN's operations are currently directed to supporting agencies within the Arts, Sport, the Environment and Territories portfolio, its significance and potential is as a national resource facility. Maintaining adequate functioning of the unit is vital, as is the means for further progress. The Steering Committee agreed that an increase in average staffing level and doubling of the budget was warranted and highly desirable to continue ERIN's development at a minimum level.[22] However, funding for 1992-1993, at $2.3 million, is the same as for the previous financial year.

---

20 *Submission* No. 89; correspondence, 20-30 November 1992.

21 H Miles, *Review of the Environmental Resources Information Network (ERIN)*, February 1992.

22 *Report on the review of the Environmental Resources Information Network (ERIN)*, ERIN Review Steering Committee, April 1992.

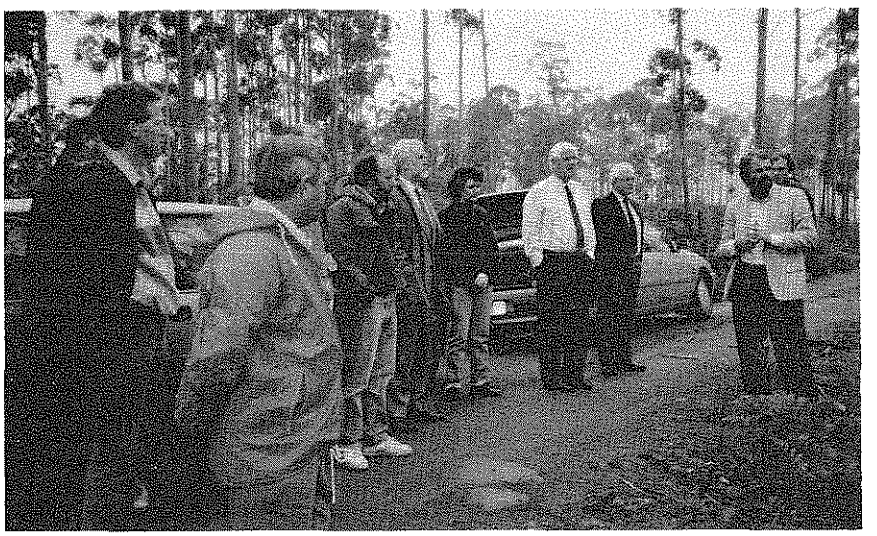
2.28 Therefore the Committee further recommends:

(5) that ERIN, through the ANPWS, immediately be given an increase in resources of three additional staff and, in the 1993-94 financial year, ERIN's allocation be increased by $2.3 million to $4.6 million to:

- further improve the quality and extension of the network;
- develop guidelines and standards;
- increase efforts in data capture and validation; and
- provide support as necessary to State/Territory agencies in identifying and implementing a bioregional framework.

2.29 The Committee emphasises that, in the long term, substantially increased resources will be required for ERIN to function adequately as a valuable national resource facility.

2.30 A wide range of data needs to be continually gathered and updated. Many institutions and agencies, as data custodians, are working towards the geocoding of existing and future biogeographic and environmental data including species distributions from biological collections. ERIN's landcover project, which is sponsoring State herbariums to place distribution information relating to taxonomic plant collections on database, has proven to be extremely valuable in this regard and has enormous additional potential for landuse and bioregional decision support systems.[23]



The Committee inspects a site of forest regrowth in the Sandspit River area of eastern Tasmania where a regional approach to forestry management is being implemented.

23 *Submissions* Nos. 5, 25, 53, 63, 65; *Inspections*, Canberra, 11 August 1992.

2.31 The need to include appropriate socio-economic data, and the view that this data should be easily accessible for bioregional planning, was raised in submissions.[24] Appropriate socio-economic data is necessary to consider the implications of population shifts, or changes to major regional industry and landuse factors on the environment. In particular, this data would assist in testing the potential for adjusted landuse schemes, economy of size factors of marginal rural holdings, as well as the incorporation of new ESD projects in regional assessment frameworks. Agencies such as the Australian Bureau of Statistics and the Australian Bureau of Agricultural and Resource Economics, as custodians of their particular datasets, would be valuable additions to the network so that such information can be more widely considered. Geocoding of this data would be preferable to maximise its usefulness to ERIN network users.

Long term ecological monitoring

2.32 It is widely known that there is a critical need to improve the breadth and quality of available scientific data through biological surveys, increased taxonomic effort and more research into survey design for a range of habitats.[25] Funding for such basic research has dropped in recent years and needs to be greatly increased. Such funding is essential and the Committee urges the government to substantially increase funding for basic scientific research and maintain it at a considerably higher level. Nevertheless, it will be impossible to survey all species, even over several decades of increased effort. Additional data on ecological processes might best be gathered through dedicated long term monitoring such as by studying reference sites across the environmental gradients which occur between bioregions.[26]

2.33 The report, *Environmental Research in Australia*, by the Australian Science and Technology Council (ASTEC) recommended implementing and maintaining a secure system of reference sites through a national long term monitoring and research program.[27] The report emphasised the importance of long term research and monitoring to improve understanding of dynamic processes in ecosystems, and how these are influenced by landuse and climate change.

2.34 The ASTEC report and a number of ESD working group reports pointed out that ecological monitoring and research on a continuous long term basis are essential for:

- providing performance indicators for ecologically sustainable resource and landuse;
- providing performance indicators for conservation programs;
- understanding the effect of slow ecological processes and event-driven processes on biodiversity and ecosystem functions;

---

24 *Submissions* Nos. 18, 20, 43, 51, 57, 67, 77, 91.
25 *Submissions* Nos. 5, 25, 26, 31, 34, 37, 48, 50, 53, 64, 68, 82, 83.
26 *Submissions* Nos. 16, 22, 23, 27, 34, 48, 53, 64, 65, 68, 75, 82, 83.
27 *Environmental Research in Australia - The Issues,* Australian Science and Technology Council, 1990.

- distinguishing short term changes brought about through human endeavours, from longer term changes brought about by global phenomena;

- providing complementarity and perspective to research undertaken over shorter time frames; and

- providing information on Australia's variable weather conditions, which need to be studied over a period of decades.

2.35 Areas of minimal human impact are particularly valuable as reference sites to collect baseline data for long term monitoring. The Victorian *Reference Areas Act, 1978* provided for the establishment of relatively undisturbed areas, reserved in perpetuity, as reference sites for monitoring. This model might be useful in establishing a collaborative Commonwealth-State network of reference sites through the IGAE.

2.36 The ANPWS submission emphasised the fact that an important objective of core protected areas is to act as reference sites for monitoring long term environmental and biological change. This is a specific objective of the UNESCO Biosphere Reserve program.[28]

> It is recommended that a national long term ecological research and monitoring program for assessment of environmental change be created by establishing and maintaining an integrated network of protected reference sites in the conservation reserve system. This system is geographically widespread and can provide the essential legislative protection to an integrated network of reference sites. It is also recommended that the ANPWS, CSIRO and the State and Territory nature conservation and land management agencies work towards developing a national program for monitoring changes to environmental regions, within and outside protected areas.[29]

2.37 To incorporate the use of ERIN's data networking and GIS capabilities, the CSIRO, in collaboration with the ANPWS, has proposed a framework for establishing a coordinated network of sites or transects for long term environmental monitoring within and across bioregions and reflecting all landuses, including protected areas.[30] The framework is known as the Australian Long Term Ecological Research and Monitoring (ALTERM) project and was explained by Dr Trevor Redhead of the CSIRO at the Committee's workshop:

> I think the immediate need being addressed here this morning has been how to establish a national system of ecologically representative protected areas. Quite correctly, the focus has been on spatial parameters, position, location, shape, size and connectedness. Long term ecological research and monitoring addresses the other aspect, the temporal aspect, and addresses the topic of how biodiversity changes, is modified, over long periods of time.
>
> There are three reasons why that knowledge is necessary. The first is, of course, to assess those changes which are taking place in protected areas as long term changes in the environment take place, whether they be climate changes or whatever. The second is that

---

28 *Submissions* Nos 22, 65; P Parker, *Briefing*, Canberra, 10 September 1992.
29 *Submission* No. 65, p. vi.
30 *Submission* No. 53, ALTERM, pp. 2-8.

long term monitoring on protected areas provides a baseline against which changes over long periods can be assessed, those changes taking place outside the protected areas.

So we would have an ability, therefore, to distinguish between long term change, which is anthropogenic, and that which is due to longer term natural changes such as the senescence in forests, the succession in wetlands and so on. And thirdly, if the monitoring had a research program with it, this would enable an understanding of those ecological processes which are slow or rare and Australia, like many other places of course, has a large number of such processes. For example, we can think of a rare flood or a rare fire and, certainly in some of the arid areas, those rare rainfall events determine the carrying capacity of the land for decades. How you manage the land at that particular time and immediately following those rare rainfall flood events, in fact, does determine the productivity of those lands for decades.

... The ALTERM proposal is a framework proposal and it needs a lot of work to be done on it before it can be established as an operational program. The basis of it is that there is already a lot of research going on and a lot of monitoring going on. A lot of it is done by State agencies who are not only responsible for the land but also responsible for managing the land in protected areas. The idea of it would be that the Commonwealth, in order to obtain the long term security of the sites on which the monitoring was done and in order to obtain the security of receipt of a small core dataset of standardised data, would contribute funding to those State agencies or others who own and manage the land. In return, they would provide to the Commonwealth, probably through ERIN, this core dataset of standardised data.[31]

2.38 At the workshop, the Committee was told that ANZECC Ministers have endorsed the ALTERM proposal in principle, subject to new and additional funds being made available to support it.

2.39 The Committee concurs that all existing facilities and resources of the States and the Commonwealth should be used, where possible, to facilitate a long term research and monitoring program. These might include the various field stations run by universities as suggested by Professor Paul Adam in the submission from the School of Biological Sciences, University of New South Wales:

> Various universities, including the University of New South Wales, maintain field stations for research and teaching. These should be considered as a national resource, rather than the indulgence of individual institutions, ... for example, our field stations are utilised by staff and students from a number of other universities. Nevertheless the maintenance of field stations is a considerable burden on their parent institutions. Given their importance for education, and their considerable potential bases for long term environmental monitoring programs (something which is currently lacking) consideration should be given ... [to] additional funding to a national network of key teaching and research field stations.[32]

2.40 The need for long term environmental monitoring is an issue which the ERA Committee has emphasised in a number of inquiry reports. Most recently the Committee reiterated that long term monitoring would be extremely useful on a bioregional basis and that further development of the ERIN system would provide the most logical option to coordinate and build upon existing databases at continental and

---

31 *Workshop*, Canberra, 9 October 1992.

32 *Submission* No. 48, p. 1.

regional scales.[33] ERIN is particularly well placed to continue the development of the use of remote sensed data for environmental audits. Establishment of an ALTERM pilot program over a few sites in the first instance would provide for the further assessment of the resources required and the potential for a fully operational program.

2.41 Accordingly, the Committee recommends:

(6) that funding of an additional $1 million over three years be provided to the CSIRO to establish an ALTERM pilot program. Establishment of the pilot program should provide the means to assess, after three years:

- the capacity to draw upon and supplement existing monitoring across all levels of landuse;
- the capacity to draw upon and support existing field research stations of universities, museums and similar institutions, and their existing research and monitoring programs;
- the capacity of the program to assist the development of a range of environmental management performance indicators;
- long term environmental planning and management requirements of all levels of government;
- the potential contribution to global, national and bioregional state of the environment reporting; and
- the funding and resources required for an ongoing program.

2.42 In the Committee's opinion the ALTERM program, implemented on a bioregional basis across all landuse categories and using core protected areas as reference sites, has the potential to meet many of the research, monitoring and performance assessment needs identified, but not addressed, in the recent environment statement by the Prime Minister.

2.43 Many of the recent and proposed national strategies, such as those for ESD, forest use, biological diversity, vertebrate pests and weeds, vulnerable and endangered species and habitats, Decade of Landcare, greenhouse and climate change, do not identify implementation mechanisms. It is imperative that all of these initiatives be implemented in a coordinated and complementary way. The Committee considers that the best way of doing this 'on the ground' and with community support, is within a bioregional planning and management framework which could be established through the mechanisms and actions recommended here.

---

33 *Biodiversity: The Contribution of Community-based Programs.*

CHAPTER 3: ESTABLISHING A NATIONWIDE SYSTEM OF ECOLOGICALLY REPRESENTATIVE PROTECTED AREAS

The one process ongoing in the 1990s that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats. This is the folly that our descendants are least likely to forgive us.

Dr E O Wilson[1]

3.1 Having established a national bioregional framework, governments will need to undertake assessment, consultation and negotiation at the bioregional level to identify which areas need to be protected as part of a nationwide system; the level of protection to be provided in each case; and the funding and management responsibilities.

3.2 Participants at the Committee's workshop agreed with the priorities emphasised by Mr Paul Sattler of the Queensland Department of Environment and Heritage:

> ... A bioregional approach is fundamental to conservation planning.
>
> ... The next step will be environmental audits of each region so as to develop regional conservation strategies. This will enable integration of an expanding park system with ESD measures. For example, the mulga lands of Queensland form one bioregion suffering extensive land degradation because of such factors as small property size compounded by the plight of the wool industry and peculiar biophysical attributes. Consideration is being given to what measures are required to maintain biodiversity in conjunction with achieving ecologically sustainable use.[2]

3.3 During this inquiry and the previous inquiry, many people told the Committee that habitats, flora and fauna known to be threatened or inadequately protected should be included in protected areas immediately. The Prime Minister's December 1992 Environment Statement recognised that there is a need to protect priority areas before completing the nationwide system by allocating funds to promote and encourage the protection of public old growth forests and wilderness by 1995. The Committee welcomes this decision and advocates the application of the principle to all priority areas as soon as possible.

---

1 Museum of Comparative Zoology, Harvard University, USA.

2 *Workshop*, Canberra, 9 October 1992.

3.4 This chapter focuses specifically on action to establish a nationwide system of ecologically representative, core protected areas. A core protected area is one where nature conservation objectives are paramount and correspond to protected area categories I and II developed by the IUCN. The full list of IUCN classifications and their definitions are given at the end of the chapter.

Ecological systems in critical need of protection

3.5 A number of State agencies and scientists have identified particular ecosystem types, habitats or vegetation communities which are in critical need of protection. Many of these are the remaining fragments of natural communities once prevalent on fertile soils, but now cleared.

3.6 The ERIN 30 group regionalisation presented at the Committee's workshop indicated, even at the continental scale, large bioregions of substantial ecosystem diversity that have less than 2% representation in protected areas. These include large continent wide belts of arid and semi-arid lands, which extend across the Northern Territory and four States (Western Australia, Queensland, New South Wales and South Australia).[3] The submission of the Arid Lands Environment Centre states that the arid zone encompasses 70% of the continent and several biogeographic regions; 60% is pastoral leasehold or freehold for cattle grazing; and less than 1% is protected for conservation purposes.[4]

3.7 Small but very significant habitat fragments may not be identified in assessments other than at a local scale, and often only with considerable local community concern and action will they be protected. The extremely important Save the Bush (STB) program, which to date has been poorly funded, focuses community based efforts on the protection of these vulnerable vegetation remnants. While welcoming the increased funding of $4.45 million for the STB program announced in the Prime Minister's Environment Statement of 21 December 1992, the Committee urges the government to further boost the total funds to the program to $10 million by 1994 as previously recommended.[5]

3.8 At the workshop and in submissions many people told the Committee of the pressing need to preserve critically vulnerable vegetation communities which are known to be unrepresented, or severely under represented, in core protected areas.[6] For example, the submission from the Royal Botanic Gardens, Sydney states:

> While plant communities on granite and sandstone are well protected, communities on higher-nutrient soils such as tall open forest, box woodlands or inland floodplains are poorly represented. Only 5-10% of tall forests remain unlogged in New South Wales and most of the box woodlands in coastal valleys and on the western slopes have been cleared for cropping and grazing. Over 40% of the forest types in the north eastern corner of New South Wales have only a minuscule or no representation in protected areas. Native

---

3 *Submission* No. 65; *Workshop,* Canberra, 9 October 1992.
4 *Submission* No. 64.
5 *Biodiversity: The Contribution of Community-based Programs,* Recommendation 1, p. 11.
6 *Submissions* Nos. 4, 5, 6, 7, 13, 27, 28, 34, 35, 39, 40, 41, 42, 48, 49, 53, 54, 59, 62, 64, 65, 66, 68, 72, 75, 83.

> grasslands in south eastern Australia are now rare. A recent study by our staff has revealed that, of the original 250,000 ha of natural grassland on the Monaro (from Canberra to the Victorian border) present at the time of European settlement, less than 1% remains as natural grasslands in good condition today.[7]

3.9 While most State and Territory agencies are aware of the severely under represented, vulnerable communities, action to acquire or otherwise protect such remnants generally is rare because of a lack of acquisition and management funds. Nevertheless, covenants to protect native vegetation remnants on private land have proven to be valuable off-reserve measures, particularly in South Australia,[8] as has the Victorian 'Land for Wildlife' Scheme.[9]

3.10 The following are some of the ecological communities identified to the Committee as urgently requiring adequate protection.[10] As such, it is not a definitive list:

Arid zone communities (in general)
Arid zone wetlands
Semi-arid shrublands
Northern Tanami Desert
Temperate native grasslands
Western and northern plains grass communities (Victoria)
Tropical and sub-tropical native grasslands
Mitchell grasslands
Herbfields
Grassy woodlands
Dry forest on fertile soils
Fertile soil communities (in general)
Wheat belt native communities (Western Australia)
Brigalow belt (Queensland)
Mulga country
Coastal heath (particularly clay soils)
Coastal littoral forest
Estuarine and brackish wetlands
Subtropical and temperate mangrove systems
Lake Eyre systems and associated wetlands
Coopers Creek basin communities
Mound springs
Mature riverine woodlands
Riparian habitats of the Lachlan River

3.11 Simply a glance at the 1989 map of Australia's present core protected areas (*Figure 2*) will demonstrate clearly the large gaps in the system of reserves.

---

7 *Submission* No. 5.
8 *Submission* No. 83.
9 *Submission* No. 49.
10 *Submissions* Nos. 4, 5, 6, 9, 27, 34, 42, 49, 53, 62, 64, 74, 75, 83; *Workshop,* Canberra, 9 October 1992; *Inspections,* Northern Australia, 31 August - 4 September 1992.

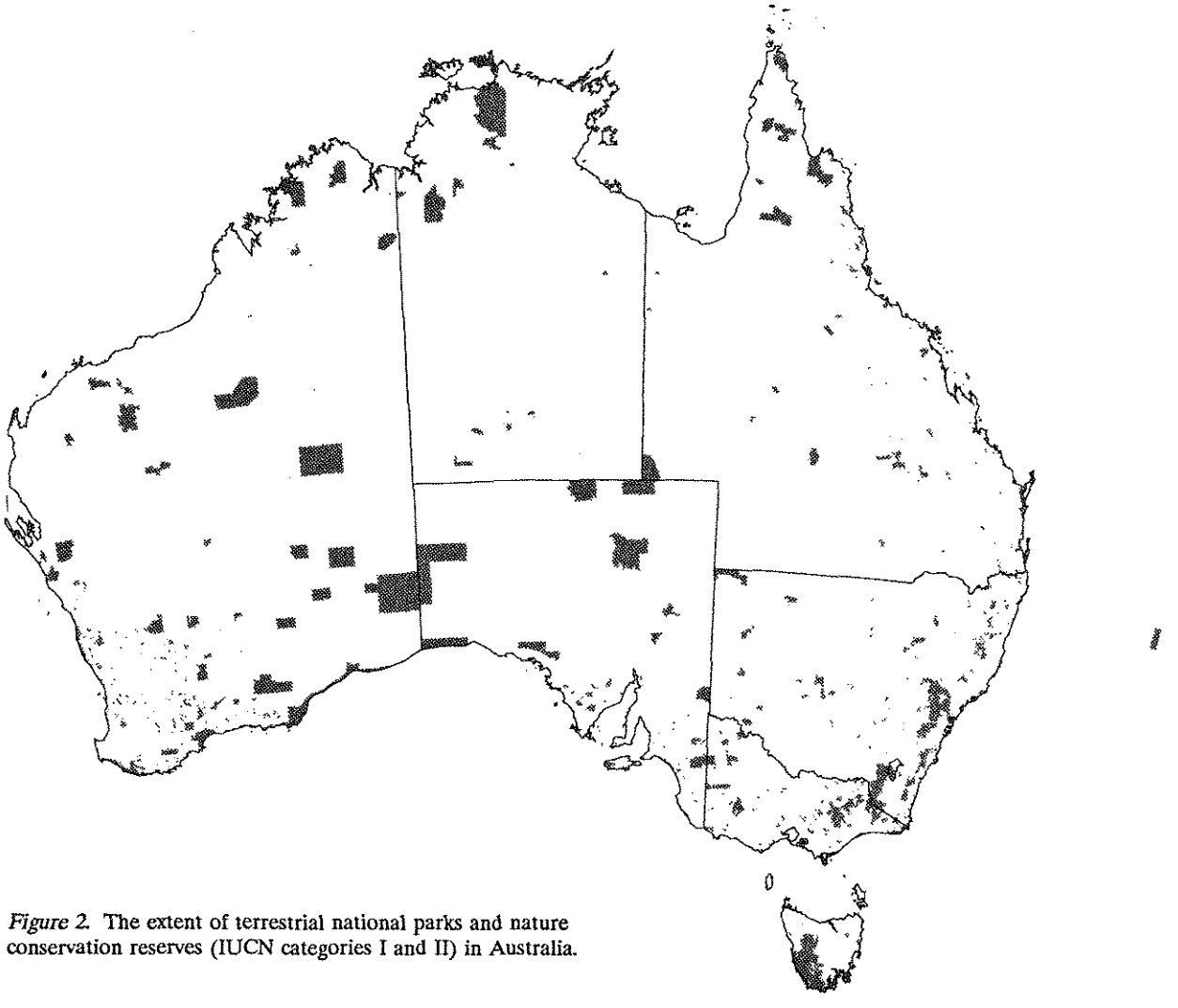


Figure 2. The extent of terrestrial national parks and nature conservation reserves (IUCN categories I and II) in Australia.

3.12 Particular attention should be paid to components of biological diversity requiring special conservation measures. The Endangered Species Program, national vertebrate pests and weeds strategies and the Save the Bush Program address some of these issues. Immediate action is required to incorporate within the protected area system those elements of biodiversity known to be vulnerable and inadequately reserved.

Efficient identification and protection of remaining gaps

3.13 The need for all governments to undertake a course of action to establish an ecologically representative system nationwide is becoming critical. This was most recently recognised in the Prime Minister's Environment Statement of 21 December 1992. Recent developments in cooperative arrangements through the IGAE and the ANZECC Ministerial council are welcomed by the Committee. Members hope these arrangements do lead to the implementation of the recommendations in this and previous reports. In addition, advances in GIS applications, coupled with other computer aided protected area identification and assessment techniques which are based on scientifically explicit methods, make nationwide establishment of a representative system of protected areas possible.

3.14 Ideally, the selection of protected areas should aim at achieving representation of all ecological communities and environments, including viable populations of their constituent species. The portion reserved is often chosen somewhat pragmatically by assessing how much a given, relatively undisturbed ecological community still exists and how much might be available for reservation.[11]

3.15 Nominating a desirable percentage of land area reserved under a particular level of protection has been the most commonly employed approach for providing goals for reservation.[12] Such percentage targets have been promoted by various international agencies and have proved valuable to many nations embarking on nature conservation strategies.

3.16 The World Commission on Environment and Development report, *Our Common Future*, recommended that protected areas should cover at least 12% of the globe and contain representative samples of the earths ecosystems.

3.17 The 'Caracas Action Plan'[13] and the IUCN[14] urged governments to ensure that protected areas cover at least 10% of each major ecosystem by the year 2000. The Canada Green plan, adopted in 1990, aims for 12% by area to be gazetted in protected areas.

---

11 See *Submissions* Nos. 3, 4, 27, 35, 53, 59, 62, 64, 65, 75.

12 See *Submissions* Nos. 15, 27, 65, 75, 90.

13 IV World Congress on National Parks and Protected Areas, Caracas, Venezuela, February 1992.

14 *A Framework for the Classification of Terrestrial and Marine Protected Areas*, IUCN-CCNPA, 1990.

3.18 While some submissions recommended 10-12% by area as useful for setting goals,[15] the limitations of this 'real estate' approach were also recognised. The figure has no particular scientific basis, nor is it well proven by experience. CRA Limited put the view to the Committee that there has been a preoccupation with real estate rather than biology in identifying protected areas.[16]

3.19 At the Committee's workshop, Professor Kirkpatrick also pointed out that such an approach will not provide for the conservation of a range of community types such as those that are rare, fragmented or highly susceptible to disturbance compared to more resilient natural communities. Based on the work of Kirkpatrick and Brown,[17] the submissions of the World Wide Fund for Nature (WWF)[18] and the Australian Conservation Foundation (ACF)[19] say that each bioregion should aim to encompass in core protected areas 30% of the original area/population of disturbance resilient communities and species, 60% of the original area/population of genotypes, species and communities that are rare or vulnerable, and 90% of the original area/population of those entities which are currently endangered. These 'rules of thumb' are based on considerable experience in assessing existing reserves and the viability of various populations of vertebrate species over different areas. Population viability analysis, however, requires a great deal more research and virtually nothing is known of the needs of invertebrates.[20]

3.20 The percentage area 'real estate' approach does not provide well for representative conservation of the various levels of biodiversity and it introduces an element of inflexibility for future conservation planning and strategies because, in the light of new knowledge, opportunities to add new sites might be foreclosed when the arbitrary percentage area of land is reached. Mr Paul Sattler illustrated this point in discussion at the Committee's workshop:

> ... The consideration of biodiversity and representation at this [bioregional] level is the critical level that planning should proceed at, rather than relying upon concepts such as a park per region or a certain percentage area per region. An approach of one per region or a percentage area per region runs the risk of being over simplistic and being manipulated so that the least productive or the traditionally worthless lands are set aside for national parks.
>
> ... There is a government commitment to double the national park estate to 4 per cent of Queensland. That is being implemented on the basis, though, of trying to secure maximum representation of biota in each of our regions. ... It was a difficult thing to try to present to the public and a way forward was to say 'Let's double the national park estate'. We are now facing the problem that once we get to 7.2 million hectares plus one, it will be very difficult to justify, on biodiversity grounds, why we should be getting that extra one hectare.[21]

---

15 For example, *Submissions* Nos. 27, 65, 75.
16 *Submission* No. 43.
17 J Kirkpatrick and M Brown, *Reservation analysis of Tasmanian forests,* Resource Assessment Commission, Forest and Timber Inquiry, Consultancy series, AGPS, Canberra, 1991.
18 *Submission* No. 27.
19 *Submission* No. 75.
20 *Submissions* Nos. 53, 74.
21 *Workshop,* Canberra, 9 October 1992.

3.21 Difficulties in providing adequate ecological representation in primarily nature preservation areas through the protection of a percentage of the total land area are highlighted in the remarks made in the submission from the Department of the Arts, Sport, the Environment and Territories:

> The terrestrial protected area system, covering 5.3% of the land area, samples only a proportion of Australia's biological diversity. Of Australia's total area of protected marine and estuarine environments, most is managed on a multiple-use zoning basis, with less than 0.5% set aside purely for nature conservation.[22]

3.22 The World Wildlife Fund's submission defines a fully representative, protected areas network as one which:

- samples all biogeographic regions of Australia;
- samples all biological diversity of a region;
- contains multiple representations of each species and systems to guard against catastrophic events; and
- incorporates viable areas and numbers of each species and system to provide optimal chances for long term retention of biological diversity.[23]

3.23 As noted in Chapter 1, conserving biodiversity cannot be achieved without a significant range of measures outside reserves as well as the establishment of a system of protected areas. Nonetheless, the WWF definition reflects the fundamental features of a protected area system which have been reiterated in past reviews and inquiries as well as in other submissions to the current inquiry.[24] They include:

- sampling of biological diversity at a range of levels;
- adequate sample size, both in terms of area and populations of biota; and
- replication of samples.

3.24 Representation of ecosystems in networks of protected areas within bioregions can proceed. Whilst the detail of biological information available varies widely between sites, it is possible to identify and represent key ecosystems within biogeographic provinces, using appropriate scales, for example at 1:250,000 or less, as has been successful in Queensland recently.[25]

> The government commitment ... is being implemented on the basis, though, of trying to secure maximum representation of biota in each of our regions. I would think that the target that we have set ourselves is something like 75 per cent representation of the major ecosystems where we have identified something like 750 major ecosystems across

---

22 *Submission* No. 82.
23 *Submission* No. 27.
24 *Submissions* Nos. 3, 5, 13, 15, 16, 22, 27, 35, 53, 65, 74, 75, 82, 86, 90.
25 *Submission* No. 71.

those 13 biogeographic regions. So there is a biological target, if you like, to which we can apply our gap analyses to see where our priorities are.[26]

3.25 A target of a particular level of ecological representation in protected areas across bioregions is a valid and far more defensible approach to conserving biodiversity than the somewhat over simplistic approach of reserving a percentage of the land area.

3.26 It is clearly logical to aim for a practical level of representation of ecosystems within bioregions so that action to maximise size and viability of protected areas, or to develop efficient networks across fragmented landscapes, can be implemented in concert with off reserve measures which can more effectively maintain all components of biodiversity within and across regions.

> There is no alternative to the acquisition of a core representative national park system for Australia. Other strategies of acquiring certain property rights and improving management to achieve ecologically sustainable development in other lands are complementary to the establishment of a core park system.[27]

3.27 The Committee received additional advice from most of the State and Territory conservation agencies, coordinated by the Queensland Department of Environment and Heritage, which confirms and supports the notion that 75-80% representation of bioregional ecosystems in core protected areas is a practical goal of reservation which is most efficiently complemented by off reserve measures:

> It is considered that 80% representation of regional ecosystems in each bioregion (where this is still possible) is a practical target for maximising representation in a protected area system, based on a scale of 1:100,000 to 1:250,000.
>
> This recommendation is based on experience over the past 3 years in implementing Queensland's program to double its park estate and to achieve maximum representation of biodiversity. Currently in this State, 60% of regional ecosystems are represented in parks of greater than 1,000 ha. This is at a scale of 1:100,000 to 1:250,000 which identifies approximately 750 regional ecosystems across the bioregions of the State.
>
> It is suggested the conservation of regional ecosystems to a level greater than 80% may be more efficiently achieved (if still possible) through other nature conservation strategies viz off park conservation agreements and direct legislative protection.[28]

3.28 Therefore, the Committee recommends:

> (7) **that, in setting up a core protected area system nationwide, the Commonwealth set as a minimum target the representation of at least 80% of bioregional ecosystems in core protected areas by the turn of the century.**

---

26 P Sattler, *Workshop*, Canberra, 9 October 1992.
27 *Submission* No. 89, p. 4.
28 *Submission* No. 89, p. 3.

3.29 Several submissions recommend the establishment of a system of large reserves across Australian bioregions and smaller, biologically complementary protected areas, as well as off-reserve measures, to ensure representation across and within bioregions.[29]

> **Dr Margules** (CSIRO) - This is what is happening in Canada. The notion that you should have at least one large reserve in each biological region is, in itself, being complementary and it is sensible at that scale. I guess what we are saying now is that in order to have adequate representation of biological features in protected areas you need to come down a scale and focus within each region on a network of sites.[30]

3.30 A bioregional framework provides the basis for designing a representative network of protected areas. Margules and Nicholls, in the submission from the CSIRO, explained that networks of reserves are required within each region:

> Practical management for biodiversity conservation will necessarily occur at the landscape scale because that is the scale of human activity. The challenge, therefore, is to develop regional landscape management plans. A key component of any such plans is the regional reserve network. Reserves in themselves will not be sufficient to protect biodiversity but they are the base on which to build regional conservation plans.
>
> ... While it is not a practical option to protect all individuals in reserves, it is possible to plan to sample the frequency distributions of species and thereby represent all species in reserves. Reserve networks should therefore encompass a complete sample of the regional biota and sustain that sample into the future.
>
> The conservation value of a site in a region is the contribution it makes to sampling and sustaining regional biological diversity. Regional diversity and reserve networks are deliberately emphasised because it is the regional complement of species which should be represented in reserves. It matters which species, not just how many there are.[31]

3.31 Methods are available for identifying and assessing regional reserve networks designed to capture an explicit level or target of representation of regional ecosystems or species assemblages. Australian researchers such as Kirkpatrick, Margules, Pressey, Nicholls and others, lead the world in the development of reserve selection procedures known as iterative methods.[32] These methods use various algorithms which may start from different points, such as from the species richest site or where there are unique occurrences, and then they generally add sites with the most new species. The aim is to sample all species or to have a high probability of sampling a high percentage of species or species assemblages. Iterative, or minimum set, methodologies select the largest site of best representation while attempting to minimise the total area of all sites.

3.32 Iterative procedures are useful because they are:

- explicit in assigning conservation value;
- efficient in showing the contribution that a set of areas, or a protected area network, makes to sampling the biodiversity of a region; and

---

29 *Submissions* Nos. 5, 13, 15, 16, 22, 27, 35, 53, 64, 65, 70, 75, 83.
30 *Workshop*, Canberra, 9 October 1992.
31 *Submission* No. 53, part V, pp. 2-3.
32 *Submission* No. 87.

. flexible in their ability to assess alternative solutions.[33]

3.33 These methodologies have considerable potential to minimise development uncertainty and therefore reduce investment risk, and to provide a valuable base for conservation and sustainable development initiatives, as explained by Dr Margules:

> If we have, for example, information about the minimum viable size of a population, we can easily ask for the set of sites, the samples and that size population. We can trade it *off against economic values. We can identify the set of sites that we would prefer and* then say, 'Okay, if one of those sites which was not irreplaceable had extreme economic value, what other sites in the region would we need to make up for the loss of that one?'. We can do that clearly and explicitly.[34]

3.34 Iterative procedures for reserve selection, along with similar methodologies being developed by the British Museum biodiversity research unit, have three key principles in common: complementarity or efficiency; flexibility; and irreplaceability. The starting point, however, is a clear goal for what is required in the reserve system at a particular scale. Given an explicit target, the three principles are concerned with the ways in which individual sites/reserves relate to one another as components of a regional protected area network.

3.35 Dr Pressey explained them at the Committee's workshop:

> ... We have to think about efficiently representing the features that we want in a system of protected areas. And that means that we have to think about the individual parts of the network being complementary, thus the name of the principle. In other words, the pieces of the network should dovetail - in terms of the things that they contain - if we are to have any chance in actually representing all or most of the natural diversity in those regions.
>
> The second principle we have called flexibility and that simply relates to the fact that in most regions there are lots and lots of ways of putting together combinations of sites to represent all the natural features. The more of those we can look at, the more chance we have of achieving, not only a basic representative system, but a system that achieves other important goals like minimising acquisition costs, maximising contiguity and therefore viability in the long term, or maximising land suitability.
>
> ... The final one is irreplaceability, which very simple says that, if you line up all your options for putting together a reserve network, some sites turn up more than others. In other words, some sites are more irreplaceable than others in achieving your basic goal. To give you a simple example of how we have done this: we took a small dataset for western New South Wales and we generated all the possible combinations of sites that would represent the full range of natural environments in this tiny region of 29 pastoral properties. The results are six levels of irreplaceability. ... one site is 100 per cent irreplaceable. In other words, if you lose that, you have done your goal; there is no chance of representing all the natural environments any more. On the other hand, if you lose [another site] which occurs in $2^1/_2$ per cent of all the possible representative networks in that region, the implications are much less serious. ... there are, in fact, levels of irreplaceability. It is not black and white; there are, in fact, shades of grey.[35]

---

33 C Margules, *Briefing*, Canberra, 20 August 1992; *Workshop*, 9 October 1992.
34 *Workshop*, Canberra, 9 October 1992.
35 *Workshop*, Canberra, 9 October 1992.

Key principles for systematic reserve selection[36]

Complementarity	Reserve selection proceeds in a step wise fashion such that at each step the new area is the most complementary site to existing areas or previous choices in terms of representing features not included elsewhere. It provides for the most efficient representation of natural features - ecosystems, habitats or species.
Flexibility	Within a bioregion, different combinations of sites may be available to form a representative protected area network. for the design of an efficient bioregional network, the larger the number of alternative networks that can be assessed, the more likely the planner is to find one that is representative and maximises values of design, land suitability and/or minimises costs.
Irreplaceability	A fundamental way of measuring the conservation value of any site. An irreplaceable site will appear in every analysis of alternative combinations of sites; it is one which must be included because significant options for preservation are lost if the site is excluded. Irreplaceability may be considered in two ways: . the potential contribution of a site to a preservation or representation goal; and . the extent to which options for preservation are lost if the site is lost.

3.36 The three principles can be applied at different scales. At a national scale, they can identify priority regions for conservation efforts; within bioregions or at a local level they can be used to identify core protected area networks which sample a very high proportion of the ecological and biological diversity that exists there. The Committee considers that States/Territories not using systematic reserve selection methods which incorporate these principles might be encouraged to do so through ANZECC, under Schedule 9 (13) of the IGAE.

3.37 In translating iterative methodologies for reserve selection into the practicalities of acquiring areas to maximise an ecologically representative network, intelligent choices will need to be made based on these principles. Dr Pressey explained how this might occur:

> ... These methods are useful in two ways: firstly, it is a framework for designing a fully representative reserve network in that we know that we have to start with the pieces that

[36] R L Pressey, C J Humphries, C R Margules, R I Vane-Wright and P H Williams, *Beyond Opportunism: Key Principles for Systematic reserve selection,* In press.

> are totally irreplaceable. We know that there are other sites for which we have few options and other sites for which we have many. One way of designing a total network is simply to work through the choices in a stepwise manner, starting with the fixed points, then looking at the next level of irreplaceability and displaying the choices and making some intelligent decision based on those choices.
>
> It has another role, too, that is, an organisation like mine, which is a State conservation agency, no matter how many times we identify ideal networks for the western division or anywhere else, will always be forced to make one-off decisions. Sites become available that we had not counted on. We have two extreme strategies, I guess. One is to say that we have now designed an ideal network, and we will only look at sites that become available that are part of that national network. The other extreme is to say that we will take anything that comes on the market. Neither of those are very sensible. Somewhere in between is a sensible course of action which involves judiciously departing from an ideal network. This sort of information gives us a way of doing that in that we can see whether a site is worth looking at if, for example, it is offered for sale to the service.[37]

3.38 While it was recognised that research on reserve selection is a young field of environmental science and requires ongoing work, in addition to building up the biodiversity database, there was considerable consensus at the Committee's workshop that these common principles might be incorporated as protocols to be followed, on a nationwide basis, in establishing an ecologically representative system of protected areas.

A nationwide program of action

3.39 *Consolidation of Australia's system of protected areas in a scientifically defensible* way which provides for the representation of a very high proportion of the nation's ecological and biological diversity requires cooperation between governments and the will to implement a program of action.

> ...the task of developing a representative system of parks and reserves nationwide is not difficult. Three actions are necessary to achieve the goal. The first is a policy commitment: that is, political will. The second is funding, and the third is a systematic basis tied to specific outcomes...[38]

3.40 The intergovernmental framework already exists through the IGAE and ANZECC, and the State/Territory agencies are in general agreement as to the way forward. The supplementary submission from the Queensland Department of Environment and Heritage reiterated the consensus of the workshop:

> The evidence presented to the [Committee's] workshop that ANZECC should be a *primary vehicle to coordinate the implementation of a park or protected area* consolidation program is strongly supported.[39]

3.41 The Committee supports the suggestion at the workshop for the establishment of a small, specific ANZECC task force comprising representatives from State and Territory nature conservation agencies and the ANPWS.

---

37 *Workshop*, Canberra, 9 October 1992.
38 P Sattler, *Workshop*, Canberra, 9 October 1992.
39 *Submission* No. 89, p. 2.

3.42 The task force would have a major role in developing and guiding a nationwide approach to establishing a representative system of protected areas. It would report through the ANZECC ministerial council.

> Mechanisms to develop these priorities and to integrate existing State approaches with ERIN should involve a small working group of the States, Territories and the Commonwealth reporting through ANZECC, which should have the key role in developing a nationwide approach. Such a group could also advise in the future on funding applications to ensure that they meet bioregional criteria and variety. The continued development of a core protected area network based upon the management objectives of the IUCN categories I and II is supported.
>
> ... This means that a cooperative approach should set the framework for a nationwide park and reserve system and indicate regional priorities, rather than be prescriptive in the development of landuse strategies and their implementation.[40]

3.43 Some participants at the Committee's workshop representing the mining industry felt that a very broad range of community interests and considerations should be represented on such a protected areas working group. However, it was clear that ESD principles and other relevant issues are being considered by the current ANZECC biodiversity task force, and that it is appropriate to specifically focus on a particular aspect relevant to the responsibilities and expertise of the task force.

> **Mr Ewing** (Australian Mining Industry Council)- any task force which looks at the mechanism and regimes which we may want to use to implement our aims must have a broader community base. I would suggest that an ANZECC task force is unlikely to provide the breadth of expertise that is necessary to achieve the greater community goals.
>
> **Mr Topham** (NSW Coal Association) - I am not quite sure whether people see ANZECC's role as being totally within that biodiversity strategy framework or in fact being able to incorporate a wide range of other considerations.
>
> **Mr Blyth** (WA Department of Conservation and Land Management) - Perhaps I could comment on that. I think ANZECC is showing right now that it is capable of taking on board other views. We have those other views represented on the biodiversity task force but, at the same time, I think it also should be remembered that there is also an ANZMEC, a minerals and energy council, and there are various other councils whose primary role is looking at the things that are the major function of that ministerial interest. ANZECC's primary ministerial interest is the environment and nature conservation, and I think it is perfectly proper that ANZECC should have that as its primary focus.
>
> **Mr Topham** - If I can just add a supplementary point, I would concur that ANZECC is the appropriate body. My point was really that ANZECC should not constrain itself to acting within the framework provided by the biodiversity strategy. I do not really take issue with the point you have made.[41]

3.44 The Committee strongly supports these cooperative arrangements and believes that a specific task force reporting through ANZECC should be formed to guide development of a nationwide system of ecologically representative protected areas. The

---

40 P Sattler, *Workshop,* Canberra, 9 October 1992.

41 *Workshop,* Canberra, 9 October 1992.

Committee considers that the Commonwealth should provide secretariat support for the task force through the ANPWS.

3.45 Accordingly the Committee recommends:

> (8) **that ANZECC establish a small specific purpose task force to facilitate, through a bioregional framework, the identification, development and consolidation of a nationwide system of ecologically representative protected areas.**

3.46 This recommendation, which stems from the Committee's workshop, has now been taken up in the *National Forest Policy Statement* released at the Perth Heads of Governments meeting in December 1992. The statement says that an ANZECC working group will be set up to establish a representative forest reserve system. The Committee, however, firmly believes that a single task force must oversee the establishment of ecologically representative protected areas across all Australian ecosystems, not forest ecosystems in isolation. There is no benefit in a separate working group developing a separate system of protected areas (i.e. for forests) out of context with the rest of the Australian environment and nature conservation estate, and out of step with an integrated ESD strategy.

3.47 The Committee recommends:

> (9) **that the task force proposed in Recommendation 8 take on the responsibilities envisaged for the ANZECC forestry working group as a part of its task in consolidating a nationwide system of ecologically representative protected areas.**

3.48 Funding for the acquisition and management of protected areas should be consistent if Australia is to consolidate and maintain an adequate reserve system. In his recent review of Australia's national parks, Professor Wescott compared Australia's expenditure on national parks in 1990 with that spent in Canada and the United States of America. While cautioning against drawing conclusions from simplistic comparisons, he provided the following figures: Australia US$146 million; Canada US$297 million; United States US$1,027 million. He concluded that:

- Australia's system of national parks was severely under resourced, if judged by international standards;
- increased funding would lead to better management and more effective conservation;
- the Commonwealth should offer tied and directed funding, through a federal agency, for the national parks and reserve system; and

. this allows for a move towards a uniform classification system for Australia's protected areas.[42]

3.49 The majority of submissions to the inquiry considered that, after a suitable bioregional framework was established, action to develop a representative system of reserves depended on a well resourced specific program for acquisition and management purposes.[43]

3.50 There was considerable agreement at the Committee's workshop on funding needs and implementation mechanisms.

> **Mr Sattler** (Queensland Department of Environment and Heritage) - The second major point is funding. This whole exercise today is of very limited value if substantial land acquisition funding is not made available as part of the need for implementing a nationwide biodiversity strategy. As an indication of possible funding levels, Queensland has expended, over the last two years and together with this year's budget, $32.5 million for national park land acquisition. This will enable an increased representation of the broad vegetation groups from 58 per cent at the start of this program to 80 per cent and the representation of regional ecosystems from about 52 per cent to approximately 65 per cent. It is estimated that another $25 million would be required to achieve greater than 75 per cent representation of regional ecosystems.
>
> Given that the States and Territories will continue to shoulder substantial ongoing management responsibilities for the parks, it is suggested that such funding should be at least on a two to one, Commonwealth-State, basis for land acquisition. Such funding could be tied, though, to meeting overall objectives of establishing a systematic park system through the mechanisms that were discussed before.
>
> Any acquisition program should extend over five years, which would be considered to be an appropriate time line to achieve the necessary momentum, to allow realistic acquisition dealing and to avoid ongoing public concern over land acquisition. The ability of funds to be held over to meet practical acquisition needs would be essential.[44]
>
> **Mr Blyth** - (WA Department of Conservation and Land Management) ... There are existing Commonwealth programs for assisting the States, the States Cooperative Assistance Program, Save the Bush Program, NSCP and so on. I think there is probably the need for another separate program which would quite specifically address the identification via biological survey, the acquisition and the ongoing management of those acquired areas and the role of the Commonwealth in helping to fund that operation. It might, in fact, be a funding program not unlike the SCAP program itself.[45]

3.51 The success of the Committee's workshop in generating constructive discussion and broad agreement across Commonwealth and State agency conservation planners and practitioners, academics and professionals was reiterated in several subsequent submissions made to the Committee.[46]

---

42 *Submission* No. 15; G C Wescott, 'Australia's Distinctive National Parks System', *Environmental Conservation* 18(4), 1991, pp. 331-340.

43 For example, *Submissions* Nos. 3, 5, 6, 15, 27, 35, 48, 65, 71, 75, 89.

44 *Workshop*, Canberra, 9 October 1992.

45 *Workshop*, Canberra, 9 October 1992.

46 *Submissions* Nos. 86-91.

3.52 Further specific suggestions and details were provided by Mr Paul Sattler after consultation with State and Territory colleagues:

> An estimate of the level of the special funding required across Australia to capture priority regional ecosystems is of the order of $150 million.
>
> This is not unrealistic in consideration of the costs of protecting urban bushland. The Brisbane City Council has recently costed the acquisition of priority bushland areas in Brisbane to be of the order of $70 million and has embarked on an ambitious acquisition program.
>
> This funding should be spread over a 5 year period, focussed on priority bioregional needs and be allocated in a manner where it can be held over until the core areas can be acquired.[47]

3.53 While the Committee welcomes the funding announced in the Prime Minister's environment statement for the purpose of maintaining and expanding protected areas, ($13.9 million over 4 years),[48] clearly it is not enough to develop an ecologically representative system of protected areas across the nation. In addition, a specific program of action is required.

3.54 The Committee has decided on an appropriate and specific course of action, and this is summarised diagrammatically in *Figure 3* on page 43. It is clear that to establish an ecologically representative system of protected areas across Australia a Commonwealth program of tied funds to the States/Territories is required. Specific criteria and protocols would need to be followed nationwide to undertake the program and to provide a bioregional framework to ensure the progress of ecologically sustainable development and other national strategies in a sensible and complementary way. The program should firmly address the regional ecosystem level of biodiversity with individual species' needs being considered in conjunction with other programs such as endangered species recovery plans and an expanded STB program.

3.55 The Committee considers that the program should run for six years with funding contributions of 2:1 by the Commonwealth:State. The Committee envisages a 12 month leadup period and, in the first 2 - 3 years, the acquisition of critical ecosystems not currently reserved. It is important that funds are able to be carried over to subsequent years and the Committee envisages the nationwide representative system being established by the turn of the century.

3.56 The Committee strongly believes that implementation of all the related strategies, such as those for ESD, forestry, wilderness, and endangered species, should occur through the program proposed here. This program, through bioregional assessments and the establishment of efficient, complementary regional reserve networks, is the best way of implementing the aims of all strategies agreed to by governments under the IGAE and the ESD strategy, in a rational and scientifically defensible way across the continent.

---

47 *Submission* No. 89, p. 4.

48 *Statement on the Environment*, pp. 5, 21.

3.57 The Committee therefore recommends:

(10) **that the Commonwealth provide $100 million over 6 years to establish a tied grants program specifically for the purpose of the acquisition of identified areas to consolidate the establishment of a nationwide system of ecologically representative core protected areas. The acquisition program would be administered in accordance with the conditions specified below.**

- **The States and Territories would be required to contribute a total of $50 million over the six year program, to match the Commonwealth funds on a 2:1 basis, so as to provide a total of $150 million over the 6 year program.**

- **The ANPWS would administer the Commonwealth funds and provide secretariat support and advice to the task force.**

- **The ANZECC task force would assess funding applications on the basis of specific protocols which might include:**

  - **a commitment of one third of required funds by the relevant State/Territory;**

  - **the adequacy of the bioregional framework;**

  - **the adequacy of scientific method in identifying bioregional networks of reserves in accordance with the principles of complementarity, flexibility and irreplaceability; and**

  - **agreement by the State/Territory agency to the development of an appropriate management plan within 18 months of acquisition, after meaningful public consultation.**

3.58 Preliminary estimates suggest that this may be sufficient to fund a program of purchases to establish a comprehensive nationwide representative reserve system.

3.59 The diagrammatic representation, *Figure 3*, shows the way in which the program might progress in a cooperative, comprehensive and efficient way. There are two stages in acquisition. The first could be implemented immediately to acquire key ecological systems well known to be critically vulnerable and under represented in protected areas. This should be accomplished in 2-3 years at the beginning of the program. During this time, the bioregional frameworks of the States and Territories should be established at the scale of 1:250,000 or finer and meshing across borders should have been completed. Bioregional environmental audits to identify ecological communities and their level of representation should be well underway.

3.60 The stage two acquisition program should aim to fill the remaining gaps with the target of achieving 80% representation of ecological communities across bioregions within core protected areas.

3.61 Off-reserve measures through community-based programs, covenants, and restrictions on native vegetation clearance are vital to efficiently maintain all ecosystems and their biological components. States, such as Victoria, which have a reasonably representative reserve system will still benefit from the program in identifying at finer scales vulnerable communities such as, for example, native grasslands and mature riverine woodlands.

Addressing management requirements

3.62 Protection of biodiversity in a conservation reserve system is generally considered to be very cost efficient. Australia's variety of protected areas have greatly differing management resource needs. In particular, remote and undisturbed country, and large areas of wilderness, usually cost very little to manage.[49] On the other hand, areas that have a high level of visitor traffic can suffer adverse environmental effects. This was a matter of particular concern to the Committee. The additional specific funding for Australia's high profile national parks and World Heritage Areas, announced in the Prime Minister's statement, is therefore welcomed.

3.63 The inadequacy of resources for the management of protected areas is a matter of great concern to many Australians. It is an issue that has often been raised with the Committee by conservation and rural community groups. These concerns were reiterated in submissions[50] and at the Committee's workshop.

3.64 Conservation agencies are very aware of the importance of public perceptions of national park and reserve management. At the workshop, Mr John Blyth of the Western Australian Department of Conservation and Land Management commented:

> ... management is critically important because the whole concept of protected areas risks being downgraded with the public if management is not adequate and if it is not well-managed to do the things that it is meant to do but also to avoid unfortunate interactions with local communities, as does so often occur with badly managed conservation areas.
>
> ... there are not the increasing resources being put into management as the system of land expands.[51]

---

49 *Submissions* Nos. 65, 82, 89.

50 *Submissions* Nos. 3, 4, 5, 12, 13, 15, 27, 35, 48, 59, 62, 64, 72, 73, 75, 82, 83, 88, 89, 90.

51 *Workshop*, Canberra, 9 October 1992.

3.65 While resources and management infrastructure for protected areas are generally matters for the State and Territory governments, there is a growing consensus that the Commonwealth should provide more direct finance to ensure consistency and quality of management across the continent. Professor Geoff Wescott supports this approach:

> In effect the Federal Government would then offer greater tied and directed funding to the States' parks agencies to run their systems in return for the States allowing the Federal overseeing agency to rationalise the system nominally under its control.[52]

3.66 At the workshop, Professor Kirkpatrick also commented on this issue:

> Basically the only national parks or equivalent reserves in Australia that have got anything like an adequate management presence at the moment are the ones that are directly financed by the Commonwealth - Kakadu, Uluru, the Tasmanian World Heritage area and the wet tropics World Heritage area. I think there is a very strong case for having a Commonwealth system of national parks in the same way the Americans do. The American system is very successful. There are parks at every level of government, and the national parks are the areas of outstanding and universal significance that exist within the country.
>
> ... I think the tied funding is the way to go, especially since a large number of our most significant areas are in the poorest State administrative units, like Tasmania and the Northern Territory. They really do not have the capabilities by themselves of managing assets of international significance that bring tourists from overseas. Some sort of tied funding mechanism that made sure that management is adequate at the level that is appropriate, without having necessarily a formal handover of management, is the way to go. I think eventually a national system of national parks would evolve as a result of that sort of mechanism, just as we have a national system of universities, even though legally a lot of them are constituted under State government Acts.[53]

3.67 While the management of parks and protected areas is largely a function of the States and Territories, and is likely to remain so, the Commonwealth has a responsibility to assist the other governments with common issues of national significance. This is recognised in the IGAE.[54]

3.68 The States Cooperative Assistance Program (SCAP), which is administered by the ANPWS, was initiated in 1983-84 to facilitate cooperative nature conservation projects of national or international significance. In 1992-93 the program had a budget of about $800,000. It has been one of the most significant and successful Commonwealth-State nature conservation programs over the last decade and was strongly endorsed in the submissions from the States/Territories, as well as in discussion at the Committee's workshop. Mr John Blyth of the Western Australian Department of Conservation and

---

52 *Submission* No. 15, p. 125; G C Wescott, 'Australia's Distinctive National Parks System', p. 339.
53 *Workshop*, Canberra, 9 October 1992.
54 *Schedule* 9, parts 3, 6, 9, 12.

Land Management suggested that SCAP is a valuable model for providing assistance to the States for developing a representative protected area system.

> There are existing Commonwealth programs for assisting the States, the States Cooperative Assistance Program, Save the Bush Program, NSCP and so on. I think there is probably the need for another separate program which would quite specifically address the identification via biological survey, the acquisition and the ongoing management of those acquired areas and the role of the Commonwealth in helping to fund that operation. It might, in fact, be a funding program not unlike the SCAP program itself.[55]

3.69 The program has been an important means of facilitating coordinated and consistent management arrangements. Through SCAP, Memoranda Of Understanding have been developed and successfully implemented in some areas, most notably for the Australian Alps national parks.[56] One current initiative includes the Lamington-Border Range area on the Queensland-New South Wales border.

3.70 As identified by the ERIN regionalisations, many bioregions will run longitudinally across State borders, particularly in the arid areas of the continent.[57] Increased cooperative arrangements and mechanisms will be required across all levels of government for the efficient use of resources for the protection and management of a representative protected area system. The Arid Lands Environment Centre proposed that the management of significant areas of currently unrepresented arid ecosystems would require cooperative management arrangements. These include: the Simpson Desert (Northern Territory, South Australia, Queensland); the Western Desert, Tanami (Northern Territory, Western Australia, Aboriginal); Lake Eyre Basin (South Australia, Aboriginal, Queensland); the black soil plains (Northern Territory, Queensland).[58]

3.71 The Committee believes that an expanded SCAP program is warranted. In addition to funding assistance for ad hoc cooperative nature conservation projects, a SCAP subprogram could provide assistance for specifically identified existing reserves to be 'upgraded' to core protected area status (IUCN category I or II). These reserves would be identified in the bioregional assessments as important components in developing a representative network of core protected areas within the bioregion and/or across jurisdictional borders. A second priority of the subprogram might be to provide assistance for specific management projects of protected areas or bioregional networks of protected areas.

---

55 *Workshop*, Canberra, 9 October 1992.
56 *Submissions* Nos. 3, 5, 28, 35, 64, 65.
57 *Submission* No. 65.
58 *Submission* No. 64.

3.72 Accordingly, the Committee recommends:

(11) **that the Commonwealth increase funding for the States Cooperative Assistance Program to $4 million to:**

- **provide increased resources to the current program;**
- **establish a subprogram specifically to upgrade the management and protection of existing reserves that are not currently core protected areas but whose enhanced protection has been identified as important to the creation of a representative bioregional network of protected areas; and**
- **fund other management projects.**

3.73 With regard to the recommended Commonwealth tied grants program for the acquisition of additional areas to achieve an ecologically representative system of protected areas, the Committee recognises that the establishment of initial management requirements is vital for providing an adequate level of protection and that State funds may not be able to meet these initial costs.

3.74 A specific program is therefore required to provide special funding for protected area establishment costs. Costs will vary depending on the intensity of management required to provide an adequate level of protection from threatening processes in the bioregional context. The Committee has been told that for every $3 spent on acquisition, on average, $1 is required for protected area establishment. The supplementary submission from the Queensland Department of Environment and Heritage outlined the basic requirements for protected area establishment:

> An example would be a property costing between $2-3 million (an average figure for major new parks in Queensland) which is relatively remote from existing infrastructure and requires staff to be accommodated on the park. Initial establishment of this hypothetical park would include the employment of two rangers, the possible upgrading of buildings for staff accommodation, the acquisition of a 4WD tray back and light equipment to maintain improvements such as waters and boundary fences, some contract work for upgrading of boundary fences, initial fire management and some feral animal and weed control would cost approximately one-third of the original acquisition cost. A small camping facility with pit toilets may be possible. ... It is recognised that such costs would very greatly throughout Australia, however on this basis, for expenditure of $150 million on acquisition an addition $50 million of tied funding to meet establishment should be considered.[59]

3.75 The ERA Committee considers that an additional program is necessary to provide for the establishment of initial management infrastructure for core protected areas acquired in the 6 year program.

---

59 *Submission* No. 89, p. 6.

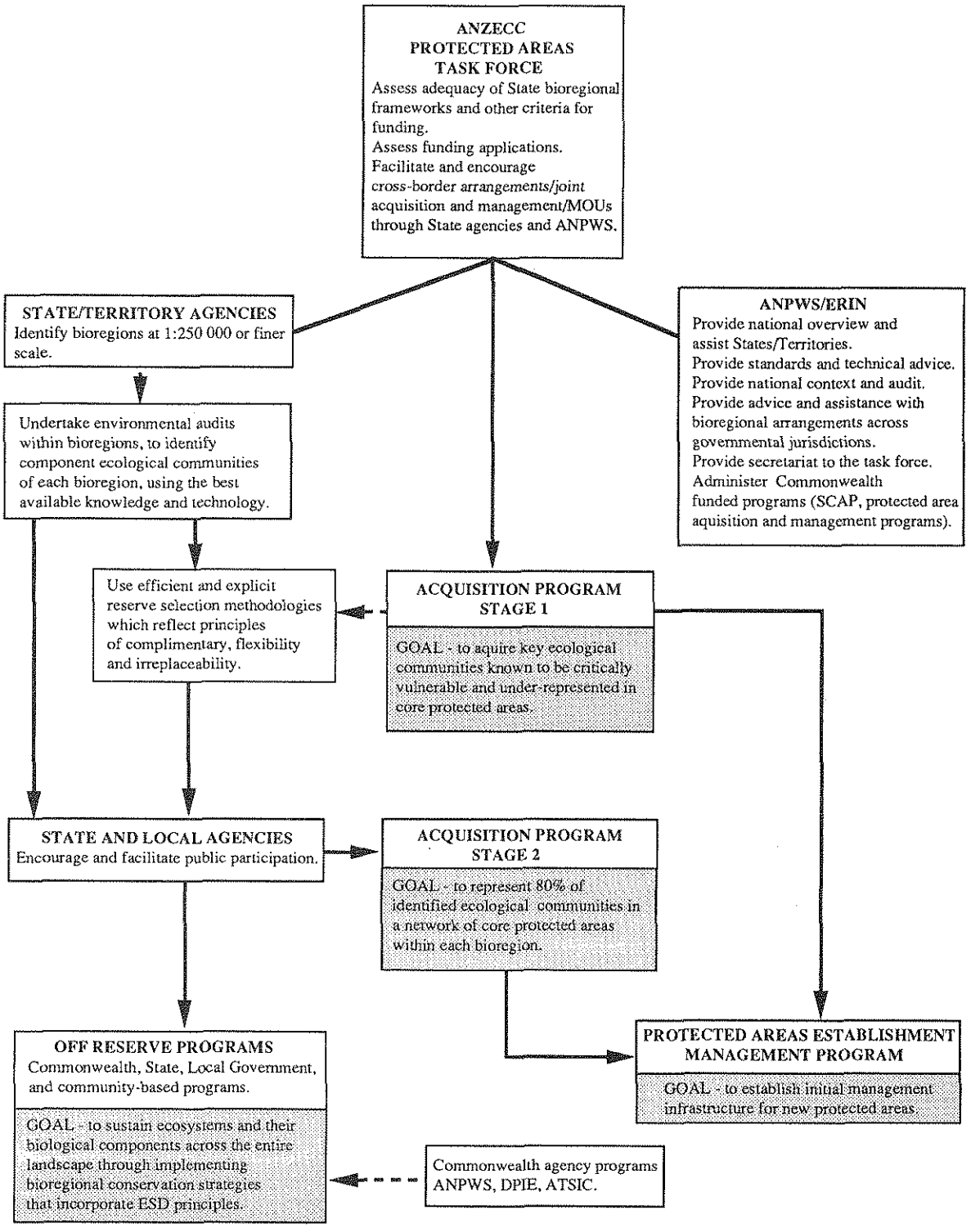


Figure 3. A bioregional approach to maintaining biodiversity and ecological processes through a nationwide system of ecologically representative protected areas and complementary off reserve measures.

3.76 Therefore the Committee recommends:

(12) **that, in conjunction with the tied grants program for acquisition of protected areas (Recommendation 10), the Commonwealth provide $50 million over 6 years to establish a tied grants program specifically to meet the management costs of establishing new reserves. In addition:**

- **the ANPWS should administer the protected areas *establishment program*;**
- **the ANZECC task force and the ANPWS should closely assess the establishment costs, as proposed by State/Territory agencies, on a case by case basis;**
- **strict accountability and detailed expenditure statements should be required of the State/Territory agencies; and**
- **the States/Territories should be required to show their capacity to meet most, if not all, ongoing management requirements.**

Consistent nomenclature for a nationwide system of protected areas

3.77 As noted in Chapter 1, a protected area system viewed in isolation will not maintain biodiversity and ecological processes unless there is complementary protection across Australia's landscapes and seascapes. Core protected areas which accord a high level of protection are nevertheless the backbone of a nation's nature conservation strategy. Therefore it is important to consider the type and level of protection which protected areas contribute on a regional and national scale, but the broad scale protection and sustainable use of the entire landscape must also be considered.

3.78 This point was made strongly at the Committee's workshop, best summed up in the words of Mr Paul Sattler:

> ... If we do not achieve sustainable land use, our reserves will not survive and we will not be able to put them in a regional context and ensure maintenance of biodiversity throughout that landscape. ... I do not think we should kid ourselves. This is the very difficult part of the process: the development of regional conservation strategies. A lot of us have been involved for a long period of time in designing representative park systems. The methodology and the tools are there, and we just need to get on and do that part. The next part that confronts this country is how we can develop regional conservation strategies that link our reserve park system with sustainable land management.[60]

---

[60] *Workshop*, Canberra, 9 October 1992.

3.79 It was acknowledged in many submissions to the inquiry and at the workshop that there is great benefit in incorporating objectives to protect biodiversity and ecosystem processes into the wider landscape in regional conservation strategies which include local government planning, agriculture, grazing, forestry, and mining. In any area which occurs outside some nominated protected area category, for whatever purpose that area is used, ecologically sustainable development principles must be applied.

3.80 There are clear advantages in having a consistent nationwide classification reflected in a system of nomenclature for established protected areas, particularly those that have as a principal objective the preservation of biodiversity and ecological processes, or higher levels of nature conservation objectives than are afforded in the surrounding areas. These benefits include easy identification of activities allowed in the area, consistency in the application of management principles, clear assessment of performance criteria, and minimal confusion and uncertainty for the community, industry and tourism.[61]

3.81 It has been suggested in a number of submissions that the classification of reserves should be rationalised and clarified. Differences in nomenclature and inconsistencies in the level of protection provided by any particular category make it difficult to gain a clear perspective of the adequacy of existing reserves to meet conservation goals. The ANPWS has suggested that the situation is unlikely to change for a considerable period of time and that it is important that all of the different protected areas can be assessed against an agreed system of classification, such as that provided by the IUCN.[62]

3.82 Professor Paul Adam, of the University of New South Wales, made the following comments in his submissions to the inquiry:

> A number of categories of protected area occur in Australia. There would be great benefit in harmonising nomenclature between States and making the terminology compatible with that recommended by the IUCN. This would not merely be a semantic exercise, uniform nomenclature would facilitate comparisons between states and, more importantly, could serve as an incentive to refine management objectives.[63]

> It seems to me that there is a need to adopt the Category V for landscape conservation in Australia, and that this should be implemented through the planning system. However, I do not see that advocacy for Category V means that existing Categories I and II lands should be reclassified. We need Category V in addition to Categories I and II, not instead of them.[64]

3.83 The WWF recommended:

> Australia should rationalise its protected areas categories and adopt the new IUCN system of five protected area categories.[65]

---

61 *Submission* No. 75.

62 *Submission* No. 65.

63 *Submission* No. 48, p. 4.

64 *Submission* No. 87, p. 1.

65 *Submission* No. 27, p. 13.

3.84 The ACF supported the application of the IUCN classification system but contended that a modified system based on categories I, II, and IV would better focus conservation objectives. The ACF has proposed five classes of protected areas: Wilderness Area; National Park; Scientific Reserve; Habitat and Wildlife Management Area; and Local Conservation Area.[66]

3.85 Most mining industry submissions, including those of BHP,[67] CRA[68] and the Australian Mining Industry Council,[69] have supported the IUCN categories, particularly the lower category V for multiple use purposes. Mr Topham of the New South Wales Coal Association, however, expressed concern in the Association's submission and at the Committee's workshop that category V does not specifically state mining as an allowed resource extraction activity.[70] He considered that there should be a sixth category. The majority of workshop participants considered that there was no problem in including mining in category V, examples being South Australia's Regional Reserves[71] and Queensland's new Resource Reserves.[72]

3.86 From an Australian perspective, it is also clear that local resident Aboriginal people should be recognised in the IUCN category II. Aboriginal people should be able to choose to live in a traditional way on their land in recognition that Aboriginal people have been a modifying influence on the natural landscape of Australia over tens of thousands of years.[73]

3.87 The majority of submissions considered that standardisation of protected area categories was desirable, although one submission expressed concern at the possibility of losing a name with which a local community might have strong affiliation.[74] It seems unlikely, however, that the specific names of protected areas would change, while common postscript parts of a name such as 'national park' or 'reserve' might be altered in some cases. The new *Queensland Nature Conservation Act 1992* provides for the rationalisation of that State's reserves and provides a useful model.

3.88 The ANPWS has recently undertaken a valuable analysis of all of the existing (approximately 50) names used by States, Territories and the Commonwealth for protected areas. These areas were classified against the IUCN categories. The Committee considers that, while this information is up to date, there are clear advantages of continuing to work towards a standardised classification system and nomenclature for the unambiguous identification of Australia's protected areas.

---

66 For detailed explanation, see *Submission* No. 75, pp. 23-24.

67 *Submission* No. 20.

68 *Submission* No. 43.

69 *Submission* No. 67.

70 *Submission* No. 85.

71 *Submission* No. 83.

72 *Submission* No. 71.

73 T De Lacy, *Submission* No. 10, *Workshop*, Canberra, 9 October 1992.

74 *Submission* No. 17.

IUCN Protected Areas Management Categories[75]

[*Main requirements identified to consider in the Australian context*]

Protected areas fall into two main groups. In *strictly protected areas* (such as scientific reserves, national parks, natural monuments, and wildlife sanctuaries) natural landscapes dominate. These are characterised by relative freedom from exotic species, cultivation, and human settlement. In *extractive protected areas* (such as national forest, hunting and fishing zones, and protected rural landscapes) limited harvesting of natural resources is allowed, generally under government control.

Protected areas are given a great variety of names by the nations establishing them, but IUCN has classified these sites into five categories according to their management objectives.

Strictly Protected Areas

I. *Strict Nature Reserves.* Generally smaller areas where the preservation of important natural values with minimum human disturbance is emphasised.
[*In the Australian context these might be larger areas including wilderness*]

II. *National Parks.* Generally larger areas with a range of outstanding features and ecosystems that people may visit for education, recreation, and inspiration as long as they do not threaten the area's values.
[*In the Australian context these should include local resident Aboriginal communities*]

III. *Natural Monuments.* Similar to National Parks, but usually smaller areas protecting a single spectacular natural feature or historic site.

Extractive Protected Areas

IV. *Habitat and Wildlife Management Areas.* Areas managed to protect and utilise wildlife species.

V. *Protected Landscapes.* Areas consisting of publicly or privately owned lands that may be subject to resource extraction - including farms, forests, freshwater areas, and coasts - and their associated human settlements, where the objective is to maintain the quality of the overall landscape, harmonious human interaction with it, and the biological diversity it contains.
[*In the Australian context this category could include mining under strict environmental conditions*]

75 *Global Biodiversity Strategy*, p. 120. Adopted by IUCN/CNPPA, Caracas 1992.

3.89 The Committee, therefore, urges all governments working through ANZECC and in the spirit of the IGAE to develop a nationwide standardised protected area classification and nomenclature for Australia's system of protected areas as soon as possible.

3.90 The Committee recommends:

(13) **that the ANZECC task force and ANPWS work to establish a consistent nomenclature and classification for Australia's protected areas. In doing so they should:**

- **build on the existing work of the ANPWS in classifying the current reserve system against IUCN categories;**
- **minimise unnecessary changes or confusion;**
- **complete the project nationwide by 1998.**

3.91 This chapter presents key recommendations that, if implemented, will establish a nationwide protected area system which is highly representative of Australia's biological diversity and ecosystems. Planning, management and community action within a bioregional framework can ensure the maintenance of biological diversity for generations to come.

3.92 In practice, this will require better and ongoing communication between the research and planning practitioners of all agencies, as well as the means to assess progress at a national level. Disseminating this information to the wider community and local government will also be important. Participants at the Committee's workshop suggested that an annual conference on protected areas would be a valuable and efficient way to further promote greater coordination and consistency of approaches among agencies at all levels of government, as well as providing a forum for the exchange of ideas and information on current techniques and research. The Committee supports the idea.

3.93 Each year the conference should aim to provide practical workshop and discussion opportunities on current issues in protected area assessment, planning and management. The Committee envisages that, over the next decade, the annual conferences could focus on the development of the programs recommended in this report. The annual conference would also provide the opportunity for the State and Territory agencies, and the ANZECC task force, to report on progress. For reasons of equity and access, there would be advantages in holding the conference in a different State/Territory each year.

3.94 The Committee recommends:

(14) **that an annual national conference on protected area assessment, planning and management be held. The ANPWS could host the conference in the first year; thereafter State and Territory agencies could take turns in hosting the conference.**

CHAPTER 4: COMMUNITY INVOLVEMENT

Local people should be closely associated with the authorities responsible for the management of biological resources and for the establishment and management of protected areas.

Interparliamentary Conference on the Global Environment, 1990[1]

4.1 Increasingly, the community expects to be informed and consulted by governments about environmental issues. Many - if not all - of Australia's protected areas exist as a result of lobbying by community groups and the community has a continuing interest in how these areas are managed. As the public debate about environmental issues has evolved, heritage and nature conservation organisations, community clubs, professional associations, industry groups, and other long-term and temporary coalitions of interested people, have sought to increase their coverage of, and involvement in, the growing environment agenda.

4.2 Governments and their agencies have responded in different ways. Some have been innovative in fostering community interest; some were slow to recognise that community expectations were changing; others have resisted subjecting their actions to greater public scrutiny. However, where the principles of participatory democracy and the pressure of community opinion have failed to improve the way in which governments and government agencies consult with the public, self interest might yet succeed: simply put, governments cannot fully implement their environmental policies without public participation and support.

4.3 The Commonwealth, State and Territory governments have made commitments to consult the public in implementing the *National Strategy for Ecologically Sustainable Development* and the *National Forest Policy Statement*. One of the guiding principles for the ESD strategy is the - curiously worded - statement that 'decisions and actions should provide for broad community involvement on issues which affect them'.[2] Objective 32.3 of the strategy is 'to ensure timely and informed contributions from stakeholders to the implementation of initiatives outlined in this strategy and in its further development, monitoring and review'.[3]

---

1 *The Interparliamentary Conference on the Global Environment: Final Proceedings*, 1990, p. 107.

2 *National Strategy for Ecologically Sustainable Development*, p. 4.

3 *National Strategy for Ecologically Sustainable Development*, p. 3.

4.4 The forest policy statement includes, as one of its 11 broad national goals, an intention 'to foster community understanding of and support for ecologically sustainable forest management in Australia and to provide opportunities for effective public participation in decision making'.[4]

4.5 Should the draft biological diversity strategy be accepted by governments, the commitment to public participation would be more explicit. The principles here include:

> Public awareness, education and community involvement are critical to the conservation of biological diversity.
>
> The knowledge and experience of local communities and people who work closely with biological diversity is of value and should be drawn upon and fully utilised.[5]

4.6 The ERA Committee endorses the stronger position taken in the revised draft biodiversity strategy, as it accords with the Committee's findings in its last report, *Biodiversity: The Contribution of Community-based Programs*. The Committee concluded that 'the successful implementation of a national biodiversity strategy will depend entirely on people and "grass roots" community action'.[6]

4.7 Perhaps the most impressive example of the necessity and desirability of community involvement in environmental issues is the Landcare program. During its last inquiry, the Committee was particularly impressed with the commitment of local Landcare groups. In addition, the Committee strongly supported the need to develop further the Save the Bush program, the One Billion Trees program, and the Murray-Darling Basin Commission's Natural Resources Management Strategy program.

4.8 The comments made during the current inquiry concerning public participation address two broad areas of concern: involvement in the development and review of protected area management, policies and plans; and involvement in planning within bioregions.

Public participation in protected area management

4.9 There are a number of examples of efforts to involve the community in the management of protected areas, and more are likely to emerge. In South Australia, for example, public participation in the management planning process is a statutory requirement for protected areas established under the *National Parks and Wildlife Act 1972*. While the legislation presently requires public scrutiny of draft management plans, it is to be amended to provide also for public input to the planning process before a draft management plan is prepared.[7] Queensland's *Nature Conservation Act 1992* provides for the establishment of a Protected Area Management Advisory Committee, which is expected to have a major role in the development and review of protected area

---

4 *National Forest Policy Statement: A New Focus for Australia's Forests*, December 1992, p. 6.

5 *A National Strategy for the Conservation of Australia's Biodiversity*, November 1992, p. 10.

6 *Biodiversity: The Contribution of Community-based Programs*, p. xii.

7 *Submission* No. 83, p. 7.

management policy. The legislation also requires that conservation plans be prepared for protected areas and that the community have formal opportunities to become involved in the planning process.[8]

4.10 Beyond public involvement in planning, direct participation on management boards or consultative committees, and in voluntary groups such as locally based 'friends of ...' groups, has been identified as appropriate.[9]

4.11 The existence of legislation requiring public participation, and mechanisms for consultation, do not necessarily ensure that the community will consider that its contribution has been meaningful. The Conservation Council of South Australia has observed that 'in many instances the community is being used as a tool of the government and bureaucracy in their public relations exercise'.[10] The Conservation Council of Western Australia has found that, following periods of public comment on draft management plans, there has been little incorporation of public concerns in the final version:

> CALM [WA Department of Conservation and Land Management] recently released its latest draft forest management strategy for comment, however before the public comment period had finished it was already implementing parts of the strategy. The final strategy in 1987 was little altered from the draft following public consultation.[11]

4.12 While the WA Conservation Council has found that the establishment of community consultative committees has helped with public participation, Professor Paul Adam is sceptical about the public consultation methods which are currently employed by conservation agencies:

> Community involvement is crucial to the long term success of any conservation program. I have doubts, however, as to whether management advisory committees, at least as they are presently constituted, are necessarily the best approach. It is difficult to assemble committees which are 'representative' of the community. In addition (and I speak from experience) there is a tendency for such committees to be ignored, except when it is convenient to do otherwise. *Although it is not appropriate to go back to Trusts, where* a committee actually runs a park, there is a need for mechanisms which ensure greater interaction between management committees and the management authorities.[12]

4.13 Mr Bruce Baskerville expressed the view that the attitudes of government agencies to public participation have changed little over time:

> Bureaucracies have tended to regard parks and reserves as their 'property', and have been unwilling to allow any individuals or groups outside the bureaucracy any meaningful role in park and reserve management, whether that be the WA Natural History Society at Pinjarra Flora and Fauna Reserve in the 1890s or Ngalia Heritage Council at Wanjarri Nature Reserve in the 1990s.[13]

---

8 *Submission* No. 71, p. 15.

9 *Submissions* Nos. 24, 29, 35, 46, 54, 62, 65.

10 *Submission* No. 28, p. 2.

11 *Submission* No. 54, pp. 3, 5.

12 *Submission* No. 87, p. 2.

13 *Submission* No. 11, p. 3.

4.14 It would be misleading and unfair to imply that it is only the values of government agencies that can hamper public consultation concerning protected areas. The submission from the Environmental Protection Authority of Western Australia cites the attempt to establish a system of conservation reserves over the past 15 years. Only half of the reserves initially proposed through a process of consultation, and broadly endorsed by government, have been established. According to the Authority, the remaining areas are subject to complex issues of land ownership and competing land uses which have not been resolved. The Authority has found that 'the will of the community for conservation reserves has flagged at the half way mark because of these issues of competing values and economic and other social interests'.[14]

4.15 Unless all parties are willing to consult and negotiate with each other, and have a commitment to do so, it is unlikely that any mechanism or procedure could produce an outcome which is seen by all concerned to be reasonable and valid. However, there is even less chance that cooperative attitudes will emerge if the current mechanisms and procedures do not ensure that all interested parties are well informed of the issues and have time to consider them. Participants must also have confidence that their views will be heeded and that the outcome of the process will be explained to them.

4.16 Dr Adrian Davey argues in his submission that Australian protected area management agencies have widely adopted overseas practices without making any modifications to accommodate Australian conditions, they are unimaginative in devising public participation programs, and they rarely provide feedback to the community once decisions are made. He puts forward a number of suggestions for improvement. These include:

- community access to the data held by management agencies - particularly the computer-based resource information systems;
- publication of management proposals of explicit criteria whereby the agency proposes to resolve conflict between competing objectives and interests;
- active and open consideration of alternative management options, not just a single preferred proposal;
- publication of explicit performance standards for management of particular protected areas; and
- explicit reference to management options and evaluation of management performance in interpretive and other materials.[15]

4.17 The ERA Committee endorses the suggestions put forward by Dr Davey. Such measures should be standard practice in the development of protected area management plans. The essential element in the design of any process of public consultation, however, should be a genuine commitment by the government agencies to exchange information and views with all interested groups in the community.

---

14 *Submission* No. 69, p. 1.

15 *Submission* No. 73, p. 3.

4.18 *The Committee welcomes the fact that the signatories to the national forestry* statement have undertaken to develop management plans for the nature conservation and wilderness reserves established under that agreement. They have pledged that 'the development of the management plans will incorporate community discussion'.[16]

Planning within bioregions

4.19 While a majority of ecological communities will be protected within reserves, the efficient conservation of all ecosystems and their biological components requires the commitment of the wider community in developing off-reserve measures.

4.20 The ERA Committee concluded in its last report that the integration of community-based activities, conservation measures and ecologically sustainable development within a bioregional planning framework is vital to the successful implementation of national ESD and biodiversity strategies. Communities and local governments should be encouraged to develop local and bioregional conservation plans and strategies to coordinate and integrate complementary mechanisms for sustainable landuse and conservation outside, as well as within, protected areas.

4.21 The maintenance of biodiversity in the long term requires local communities and municipal planning authorities, as well as other government agencies, to provide for the protection of the entire landscape. In particular, the integrity of protected areas within and across bioregions must be maintained through complementary landuse around protected areas and the minimisation of detrimental edge effects. Other factors to consider include the appropriate siting of tourism and industry infrastructure to avoid adverse environmental impacts to protected areas or their immediate surrounds.

4.22 Moreover, all governments have agreed, through the IGAE, to minimise duplication of activity. Government agencies increasingly will have to work with and trust each other in developing and implementing policies and in consulting the community. Planning and consultative processes should draw together the many goals and guidelines contained in the plethora of strategies, plans and programs which are being generated at all levels of government.

The role of local government

4.23 At the 1992 Fenner Environment Conference which was organised to discuss the draft national biodiversity strategy, Dr Nicky Goudberg, of the Townsville City Council, pointed out the important role of local government in environment management:

> Although not recognised constitutionally, local government oversees the day to day management of urban and rural Australia. Most threats to biodiversity are addressed by local government bylaws and have occurred under local government land management practices. Unless changes are made at this local level, and the community is involved from the start, the chances of successfully arresting our loss of biodiversity are greatly decreased.[17]

---

16 *National Forest Policy Statement*, p. 11.

17 N Goudberg, 'A Local Government Response to the Strategy for the Conservation of Biological Diversity', address to the 1992 Fenner Conference.

4.24 Local governments are under pressure to be: multifunctional in administration; integrated in decision making; community based; pragmatic; and capable of innovation.[18] There are a number of examples where local governments have cooperated on regional initiatives: for large works such as flood mitigation and electricity supply; the Bendigo region is working on a regional conservation strategy; the Liverpool Council has a coordinated plan for managing the Georges River; and the Murray-Darling catchment strategy requires the support of 247 local governments. Despite these and many other attempts, local governments and their constituents can see a clear need for improvement - and for resources to allow improvement to occur. A recent survey of local governments by the Centre for Resource and Environmental Studies found that 'there are almost as many barriers between departments in the one council as between the physically, and often politically, separated sections of the larger bureaucracies of States and Commonwealth'.[19]

4.25 Certainly, there is a need for integration of decision making and protocols for ecologically sound planning. As the Western Australian Municipal Association has observed:

> Local Governments have considerable powers under enabling and delegated legislation in each State. The myriad of cumulative/incremental development control decisions made in the past without reference to an ecologically sound land use planning instrument may well be the most significant contributor to biodiversity loss across Australia.[20]

4.26 Kiama Municipal Council put the view that 'strong "national" policies would be an incentive for the regional cooperation needed to preserve habitat areas'[21] and the North Coast Environment Council has called on the federal government to assume a greater responsibility for biodiversity, environmental protection and land-use planning at the local level.[22] The Australian Conservation Federation has recommended that 'a tiered system of government responsibilities should be developed which explicitly states the responsibilities of local, state and federal governments in the conservation of biodiversity,'[23] while the Gold Coast Environment Centre has suggested that legislation be introduced to establish guidelines on the responsibilities of local governments.[24] The Tasmanian Government's submission appears to endorse a report prepared recently for the Local Government Ministers' Council on the role of local government in environmental management:

> The report stresses the necessity to reform the relationships between the three spheres of government in line with a set of principles that allows each sphere to participate in the development and implementation of environmental policy. This approach is consistent with the mechanism proposed in the IGAE.[25]

---

18 V A Brown, L Orr, D I Smith, *Acting Locally: Meeting the environmental information needs of local government*, 1992, p. 71.

19 *Acting Locally*, p. 37.

20 *Submission* No. 18, p. 1.

21 *Submission* No. 57, p. 4.

22 *Submission* No. 41, p. 11.

23 *Submission* No. 75, p. 27.

24 *Submission* No. 35, p. 2.

25 *Submission* No. 66, p. 11.

4.27 The national leadership and clarification of responsibilities sought by these and other commentators are provided to some extent in Section 2 of the IGAE and in the national ESD strategy. Under the ESD strategy, governments undertake to 'utilise the IGAE to provide the framework for a land use decision making process which reduces fragmentation and duplication between levels of government' and to 'facilitate action by local municipalities to develop local strategies for ESD, based on community input and participation'.[26]

4.28 It is necessary to look elsewhere, however, to discover how local governments will be provided with the detailed guidance, resources, skills and information to effectively meet the responsibilities they are being given.

4.29 As a result of the survey of local governments mentioned above, the Department of the Arts, Sport, the Environment and Territories (DASET), which funded the study, and the Office of Local Government, designed and implemented a coordinated national strategy to support environmental management at the local level. The Office of Local Government has established an Environment Information and Support for Local Governments Program; a Local Government Development Program; and a National Local Government Resource Program. Neither the local government strategy, nor any of these programs, are mentioned in the ESD strategy, the national forest statement, the Prime Minister's environment statement, the draft biodiversity strategy, or any of the submissions to the ERA Committee's inquiry.

4.30 The Committee welcomes the initiatives being taken to consult with and assist local governments in meeting their environmental management responsibilities. It is too soon to evaluate the effectiveness of these new programs, but the Committee stresses that it is extremely important that there be strong support for local government activity in this area, including assistance with meeting additional staffing requirements and in implementing environmental initiatives. At the Committee's workshop, Dr Kris Plowman highlighted the broad scope for local governments to determine the success or otherwise of national policies to maintain biodiversity, and the need for education and training programs and support for measures which encourage consultation with the community:

> Certainly, some planning is done in local government still to this day by using a cadastral map and making decisions about what planning will be, without looking at anything like the contours, where watercourses are or any of that sort of thing. Hopefully, this is changing. Local governments also are mostly rural in Australia and often very poorly resourced. You will find if you look in the Queensland listing of local governments that *many rural local governments do not have a local engineer. They certainly do not have* a planner. Those people are hired on a consultancy basis. So the amount of experience and expertise that is within those local government areas is low. There needs to be some assistance given by the State Government and the Commonwealth Government to encouraging an education and training program within those local governments so that people actually look and plan from an environmental perspective; so that they plan taking into account ecological processes and they look at this when they are doing their zoning and their town plans.

---

26 *National Strategy for Ecologically Sustainable Development*, pp. 17, 39.

> In many cases, the zoning and the town planning operations are undertaken by consultants and often without a great deal of participation from the local people. That process has to go back and become more locally oriented. Certainly, in a number of local authorities at the moment, the participation rate is quite high and there are actually consultative groupings of the community within local government advising the planning process. This needs to be encouraged and it needs to be facilitated.[27]

4.31 The Committee is concerned about the fact that the measures which are being taken under the national strategy to support environmental management at the local level appear to be on the periphery of the development of nationwide environmental policies that directly affect local governments. Under the National Local Government Resource Program, for example, the Office of Local Government has established an Advisory Group to the Minister for Local Government. The Group, comprising representatives from industry, conservation groups, non-government agencies, research centres, and local government, is to develop long-term strategies for local government in relation to federal and state initiatives and local government needs. The ERA Committee would expect this group to play a major role in influencing how the biodiversity strategy is implemented.

4.32 The Committee notes that DASET has provided funding for resource workers to be based with State local government professional associations in Queensland, Western Australia and Victoria to provide information, contacts and answers to environmentally related queries to assist local government officers, departments and associated professions.[28] While beginning to address the very important information needs of local government, this initiative needs to be expanded to cover all bioregions and to extend to the community.

4.33 Similarly, DASET has funded the pilot CouncilNet project, which is a computer conferencing and e-mail system linking local governments on environmental issues. The Committee welcomes this initiative, which has received strong support from the local governments concerned. It is pertinent to recognise, however, that the project is at least partly in response to the survey recommendation that: 'Local Governments should combine in developing a community access computer linkage dedicated to local government needs'.[29] From the viewpoint both of governments and the community, productive public consultation can occur only if *all* parties are well informed about the issues.

Community participation

4.34 The processes of community consultation in bioregional planning should reflect the wishes of the local community. Unless the community feels comfortable with the decision making processes, it is unlikely to accept the decisions which are made. In addition, as Dr Kris Plowman explained at the Committee's workshop, genuine consultation with the community can help to overcome divisions:

> I think local governments can play a really important part in taking the message to the community about why we think various initiatives, such as biodiversity, are important from a national perspective. But ... it must be explained to people why we think those

---

27 *Workshop*, Canberra, 9 October 1992.

28 *Acting Locally*, p. 79.

29 *Acting Locally*, p. 82.

things are important and we must allow people time to think about them. The sort of public participation where you have a meeting and you say, 'We have had this great idea; we are going to do this. What do you reckon? You can all go home now and we will put it into place' is really very unhelpful to the public, although it does reduce the amount of aggro you might get in terms of working in your office. I can quite understand that part of it. But public participation takes time; we have got to give it time. We have got to give people time to think about it, go home, talk about it and come back. People change their minds; they can come to a meeting with very strong ideas, hear someone else's point of view and go away and think that maybe they could do that. So I think we really need to push for just that bit of space, that bit of time, to think about it carefully.[30]

4.35 The Committee welcomes the initiative of the Office of Local Government in funding, under the Environment Information and Support for Local Government Program, an investigation of three types of case study in environmental decision making: interactions between broad national programs and local action; initiatives generated at the local level; and innovative environmental management in local councils. The Committee is also pleased to note that the ESD strategy focuses directly on conflict management and, among other measures, includes and undertaking to 'examine, in conjunction with the Australian Local Government Association, the feasibility of integrating non-legal conflict resolution mechanisms into the decision making system of local government'.[31]

4.36 Of particular importance is that the ESD strategy has specified principles for consultation which reflect many of the concerns raised with the Committee about decision making processes. The Committee fully endorses them:

- consultation should become an integral part of decision making processes;
- all major stakeholders should be identified and their involvement in the consultative process encouraged;
- stakeholders should be provided with opportunities to develop an understanding of the issues sufficient to enable effective involvement in the consultative process;
- adequate opportunities should exist for timely input to the consultative process; and
- agencies should meet the community's expectation that views will be heard and considered.[32]

4.37 Also of relevance are the factors which governments have agreed to take into account in their resource decision making processes:

- stakeholders and decision makers should have access to information regarding the potential environmental, economic and social values of the resources over time, of a quality matching the importance of the resource allocation decision;
- the level of assessment should be appropriate to the degree of environmental, economic and social significance;

---

30 *Workshop*, Canberra, 9 October 1992.
31 *National Strategy for Ecologically Sustainable Development*, p. 59.
32 *National Strategy for Ecologically Sustainable Development*, p. 61.

- consultation with affected individuals, groups and organisations;
- assessment and decision processes should be coordinated, transparent, not involve duplication and avoid undue delay; and
- final decisions by government or authorities, where conflict remains, should be transparent and made within a timetable which stakeholders understand.[33]

4.38 The revised draft of the national biodiversity strategy has further, yet complementary, undertakings with regard to public consultation. The Committee is concerned to ensure that perceived differences in consultation policies do not emerge simply because they are explained differently in strategy documents. At the same time, the Committee recognises that the measures in the draft strategy are appropriate and desirable:

> Facilitate greater public involvement and participation in measures to conserve biological diversity by:
>
> - ensuring public participation is a meaningful component in regional planning, environmental impact assessment procedures and other planning processes that involve biological diversity conservation;
> - increasing community involvement in research and management activities in protected areas and vegetation remnants, and in biological diversity programs, particularly those involving survey, revegetation and rehabilitation; and
> - improving opportunities for community groups to participate in the debate about the conservation of biological diversity.[34]

4.39 The Committee recommends:

(15) that the principles for community consultation which appear in the ESD strategy be incorporated into the national biodiversity strategy.

Bioregional facilitators

4.40 The Committee's investigation of the contribution of community-based programs to the maintenance of biodiversity left it in no doubt about the importance to local governments and community groups of personal contact, the ready availability of advice, and access to scientific and program information.

4.41 As a result, the Committee recommended that:

> the Commonwealth and State/Territory governments collaborate to establish and resource a national network of biodiversity programs facilitators, so that, in each bioregion, an appropriately qualified facilitator is based locally to provide ongoing information support, technical advice and scientific extension to community based groups on all natural resource programs.[35]

---

33 *National Strategy for Ecologically Sustainable Development*, p. 59.

34 *A National Strategy for the Conservation of Australia's Biodiversity*, p. 32.

35 *Biodiversity: The Contribution of Community-based Programs*, Recommendation 24, p. xvi.

4.42 The Committee is pleased to note that the ESD strategy includes an undertaking to 'improve extension services to raise the technical and advisory skills of those facilitating and coordinating collective or community-based groups',[36] even though it appears as an issue for the agriculture sector rather than as a community awareness measure. The revised draft national biodiversity strategy proposes that 'consideration should be given to the provision of suitably trained facilitators who would help with community participation, facilitate cooperation and encourage resource managers to pursue ecological sustainability'.[37]

4.43 The Committee considers that the case for the establishment of bioregional facilitators is clear. Local governments and the community are struggling to keep abreast of the many programs, policies, research tasks, reviews and proposals that are emerging from local, state, national and international developments. They are being asked to absorb complex information, form an opinion on it, and present their views possibly as part of a new planning and consultative process with which they are unfamiliar. While the need to assist in the implementation of biodiversity programs alone justifies the establishment of bioregional facilitators, the scope for them to play a crucial role in bioregional planning to achieve ESD goals makes their presence essential, at least during the development of initial bioregional plans.

4.44 The Committee recommends:

> (16) **that the Commonwealth offer to fund the salary and salary-related costs of bioregional facilitators for biodiversity and ESD initiatives, on the condition that other governments meet the remainder of the costs, for an initial period of three years, after which the arrangement would be reviewed.**

4.45 The facilitators would be selected by regional authorities and, where possible, would be drawn from the local population. Clearly, however, local governments and the community will still need further assistance through education and training programs, such as a public education program on the value of biodiversity and the community's role in protecting it, and resource support, such as the Grants to Voluntary Conservation Organisations.

Biosphere reserves

4.46 The biosphere reserve concept is being applied to the management of core protected areas, surrounding transition zones and sustainable landuse initiatives in the Fitzgerald River region of Western Australia[38] and the wider Dangalli region of South Australia.[39]

---

36 *National Strategy for Ecologically Sustainable Development*, p. 14.

37 *A National Strategy for the Conservation of Australia's Biodiversity*, p. 13.

38 K Gillen, *Workshop*, Canberra, 9 October 1992.

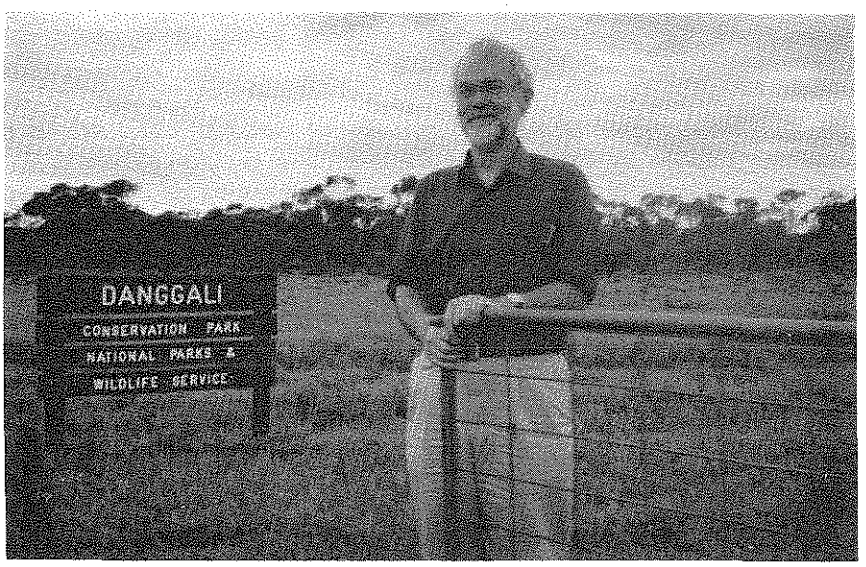
39 *Submission* No. 22; *Inspections*, South Australia, 28-29 October 1992.

4.47 Dr Pamela Parker described the value of the concept in a submission to the inquiry:

> The Biosphere Reserve Program is a vehicle for public/private cooperation in achieving sustainable use, sustainable conservation and quality of life. This is accomplished through a commitment to local participation in zoning of Biosphere Reserves and their outlying areas for:
>
> - core protection of biological resources and environmental monitoring;
> - for a buffer zone of restricted uses including education and experiments in sustainable utilisation of resources; and
> - for a transition zone of a variety of economic and conservation purposes based on the capacity of the land to support these uses. Local community participation is essential to all of these phases and reserve resources are to be integrated into the life and support of the community.[40]

4.48 As discussed in Chapter 1, the acquisition of Calperum pastoral leases, supported by the Committee and subsequently announced in the Prime Minister's statement on the environment, will contribute substantially to the Dangalli project.

4.49 While the biosphere reserve model needs further development and refinement if it is to be effectively applied in Australia, the Committee considers it has the potential to demonstrate ESD and bioregional planning in action.



The Committee Chair, Mr John Langmore MP, at Dangalli Conservation Park, during the Committee's visit to South Australia in October 1992. The Committee recommended to the Commonwealth Government that funding be provided to assist the purchase of the adjoining property, Calperum. The Prime Minister announced the funding in his environment statement on 21 December 1992.

---

40 *Submission* No. 22, p. 2.

Consultation with indigenous peoples

4.50 Community interest and involvement in the identification and management of protected areas has been, and will continue to be, an expression of a range of concerns, motives and values. Mechanisms for consultation need to recognise this in all cases, but the meaningful participation of Aboriginal and Torres Strait Islander people often requires issues of particular complexity and sensitivity to be addressed and an understanding of cultural differences which can call for alternative approaches to consultation.

4.51 Since the establishment of joint management arrangements at Kakadu, followed by similar agreements at Uluru, Gurig and Nitmiluk, discussion of the involvement of Aborigines and Torres Strait Islanders in protected areas has been firmly linked to the issue of land rights. This in turn has bolstered the connections to the issues of self-determination, economic development, skills acquisition, employment creation, and the preservation of cultural heritage and traditional practices. The links have become even more pronounced as a result of the Mabo decision. At the same time, there has been a belated but growing recognition of the impact that traditional land management has had on the Australian landscape and the contribution which traditional knowledge and practices can make to the maintenance of biodiversity.

4.52 The involvement of indigenous people in the management of national parks has therefore increased in importance both to traditional owners and to government conservation agencies. Each party needs the other to achieve their goals, but the goals are not always compatible. Negotiations have become more complex yet, where they have succeeded, they have inspired further attempts.

4.53 The shifting relationships in protected area management also reflect the wider recognition by governments that the power of Aboriginal and Torres Strait Islander people, and their capacity for self-determination, must be increased fundamentally and substantially.

4.54 In June 1992, all governments indicated support for most of the recommendations of the Royal Commission into Aboriginal Deaths in Custody. Recommendation 188 was unanimously supported, and most governments felt that they were already implementing it:

> that Governments negotiate with appropriate Aboriginal organisations and communities to determine guidelines as to the procedures and processes which should be followed to ensure that the self-determination principle is applied in the design and implementation of any policy or program which will particularly affect Aboriginal people.[41]

4.55 In addition, governments have agreed to undertake a range of measures under the ESD strategy to 'ensure full participation by Aboriginal and Torres Strait Islander peoples in community progress towards ESD'.[42]

---

41 *Aboriginal Deaths in Custody : Response by Governments to Royal Commission.* June 1992, pp. 718-721.

42 *National Strategy for Ecologically Sustainable Development*, p. 47.

4.56 Dr Dermot Smyth has argued that governments have failed to produce a comprehensive environmental policy that recognises the interests of indigenous people:

> Both the ESD process and the development of the Draft Biodiversity Strategy ... failed to provide adequate involvement of Aboriginal and Torres Strait Islander people, and failed to seriously address the link between indigenous management practices and the conservation of biodiversity.[43]

4.57 Dr Smyth identifies in particular a lack of coordination and consistency of approach within DASET and between the portfolio agencies. He proposes that an Indigenous Environment Policy Unit be established within DASET to: give leadership and advice to portfolio and other government agencies; monitor policy and program initiatives and develop new ones; promote an understanding of the relationship between environmental management and indigenous people and their culture; liaise with relevant community organisations; and support Aboriginal and Islander initiatives in conservation management.[44]

4.58 The Committee agrees that there is a lack of strategic direction at the Commonwealth level concerning the involvement of Aboriginal and Torres Strait Islander people in the development and implementation of environmental policy. Perhaps DASET and the portfolio agencies should revise their policy development and coordination procedures, but the Committee is not convinced that DASET should perform a wider program monitoring and development role on behalf of Aboriginal interests. The role of liaising with Aboriginal and Torres Strait Islander people about their views on conservation management policies and programs is a role appropriately undertaken by ATSIC. ATSIC should also represent those views in the development of such policies and programs. It should be involved, for example, in the drafting of the biodiversity, endangered species, weed control and feral pest strategies.

Employment and training

4.59 It is becoming widely recognised that Aboriginal people with traditional knowledge and skills have expertise which can be of great value to non-Aboriginal scientists and government conservation agencies in protected area management and the maintenance of biodiversity. There is growing interest in research into traditional land management practices; an increasing demand from Aboriginal communities for employment opportunities for Aboriginal rangers to be created; and a proliferation of formal and on-the-job training programs for Aboriginal and non-Aboriginal students. In all cases, success has depended upon extensive negotiations with Aboriginal communities.

4.60 As one of the pioneers of joint management of protected areas, the ANPWS has developed a good deal of experience in working with Aborigines in applying traditional practices, including training and employing Aboriginal rangers and undertaking collaborative research. It is therefore appropriate that the Aboriginal Programs Section of the ANPWS has a major role in promoting Aboriginal and Torres Strait Islander involvement in nature conservation and cultural heritage management as part of the Aboriginal Employment Development Program.

---

43 *Submission* No. 8, p. 2.

44 *Submission* No. 8, p. 6.

4.61 The ANPWS has developed an Aboriginal Recruitment, Training and Career Development Strategy, in conjunction with the Department of Employment Education and Training and ATSIC, which the relevant Ministers and Aboriginal representatives of Uluru and Kakadu National Parks have endorsed. Under a joint agreement between the ANPWS and the Department of Employment, Education and Training, the strategy is funded until the end of 1995-96. The Aboriginal Programs Section is required to develop and monitor similar five year strategies with State and Territory nature conservation agencies.

4.62 The ANPWS Aboriginal employment strategy is comprehensive and addresses concerns which have been raised by Aboriginal communities. In this respect it can serve as a model for State and Territory conservation agencies. However, the Committee notes that there are few measurable objectives and no mention of an evaluation process. This strategy, and those developed by other conservation agencies, can have a significant impact on the aspirations of Aboriginal people to promote, learn about, and seek employment in, nature conservation. It is important that those to whom it is targeted are guaranteed the chance to provide feedback, and it is simply good management to set meaningful objectives.

4.63 The Committee recommends:

> (17) **that the ANPWS Aboriginal Recruitment, Training and Career Development Strategy, and similar strategies which the ANPWS develops in conjunction with State and Territory conservation agencies, contain measurable objectives and specify a process of evaluation and review which includes the participation of Aboriginal and Torres Strait Islander people.**

4.64 The Aboriginal Programs Section of the ANPWS is also responsible for seeking formal recognition and accreditation of traditional Aboriginal and Torres Strait Islander land management practices from educational institutions and employment training agencies. This includes providing advice on course content, from the viewpoint of promoting recognition of traditional practices and in order to encourage adequate preparation for employment in natural and cultural resource management.

4.65 The development of appropriate curriculums, teaching materials and methods, in consultation with Aboriginal communities, is being pursued by various government agencies and educational institutions to meet different training needs. They have included on-the-job Aboriginal training programs as well as formal courses. Most notably, courses at Cairns TAFE, South Australia TAFE, the Northern Territory Open College of TAFE at Katherine, and Charles Sturt University have made significant advances in the design and delivery of education to Aboriginal trainee rangers. In all cases, success has depended upon extensive negotiations with Aboriginal communities and their active involvement in determining the course content and, where possible, in teaching, supervising and assessing students. Discussions which the Committee held with teaching staff, students and community members about the Aboriginal trainee ranger courses reflected a generally high degree of satisfaction with the quality, but a desire for more resources to develop the courses further.

Cooperative research

4.66 There is a significant amount of interest among non-Aboriginal scientists in working with Aboriginal and Torres Strait Islander people in conducting research because of the increased quality of the information gathered, and the savings in time and resources, when traditional knowledge is utilised. The successful collaboration between Anangu and non-Aboriginal scientists and managers in undertaking an ecological survey of the vertebrate fauna of Uluru National Park is one example. Anangu have demonstrated a superior knowledge of tracks, scats, burrows, traces and calls of wildlife; they have highly developed skills in finding and catching animals; they are able to provide very detailed natural history information, some of which is new to western science; and they have the necessary knowledge and skills to implement appropriate patch burning practices.[45]

4.67 Mr David Carter, who presented information at the Committee's workshop on behalf of the traditional owners of Uluru, emphasised how essential it was that Anangu controlled the project and continue to control, and benefit from, the knowledge that they impart. Participating in the survey reaffirmed the worth of Anangu specialist knowledge, enhanced the status of those who are the most knowledgeable and skilled within Anangu society, and encouraged younger members to value and learn about traditional knowledge and culture. The project provided direct employment opportunities and the potential for further employment, either as a result of the survey's recommendations or because of the non-Aboriginal management and scientific skills which had been acquired. Benefits could also be expected in improved land management.[46]

4.68 The features of the collaborative arrangements which led to the success of the fauna survey have been identified as follows:

- Anangu own the land:
- the flow of information and tangible benefits was two-way;
- Anangu had decision making power, ensured through holding the majority of places on the Uluru Board of Management;
- Anangu were involved with all phases of the project - planning, execution, interpretation and conclusions;
- Anangu retained control of their knowledge and its usage;
- fluent, bilingual people were involved to enhance communication - when this was impossible, tape transcripts were used;
- informants of both sexes were consulted, in recognition of gender-specific skills;

---

45 *Workshop*, Canberra, 9 October 1992

46 J Reid J, L Baker, S R Morton, Mutitjulu Community 'Traditional Knowledge and Ecological Survey = Better Land Management' 1992, p. 3.

- vetting of all information with Anangu took place at the end of the project but prior to publication, to ensure its correct interpretation and appropriate usage;

- appropriate consulting rates for people with expert knowledge were paid;

- non-Aboriginal collaborators were constantly made aware of cross-cultural issues;

- regimented, European-style work practices were not demanded of Anangu - flexibility is the key;

- sufficient time for negotiations was planned, to establish good working relations.[47]

4.69 Recommended Action 6.1.7 of the revised draft biodiversity strategy highlights the importance of the knowledge of indigenous people in enhancing knowledge and understanding of biological diversity:

> Recognise the value of the traditional knowledge and practices of Aboriginal people and Torres Strait Islanders and integrate this knowledge and those practices into biological diversity research and conservation programs by:
>
> - encouraging the recording (with the approval and involvement of the indigenous people concerned) of traditional knowledge and practices;
>
> - assessing their potential value for nutritional and medicinal purposes, wildlife and protected area management and other purposes; and
>
> - applying traditional knowledge and practices in ways which ensure the equitable sharing of the benefits arising from their use.[48]

4.70 The Committee is concerned that the simple parenthetical reference to the involvement of indigenous communities does not reflect the importance of the terms of the collaborative process to the people from whom the information, advice and assistance is sought; nor does it recognise the cultural dimensions of the relationship of indigenous people to their land. Identifying traditional practices and culture raises 'questions of authenticity, privilege and power' as well as being far more than an exercise in information gathering:

> While such knowledge and practice certainly exist, it is not found as a reified entity or commodity which can be extracted from its context, processed and packaged quickly and unproblematically. Indeed, our consultants did not find knowledge of fire, wildlife, plants, bush tucker and cultural sites there for the plucking. To reiterate, then, there is no fixed and frozen corpus of orthodox knowledge and practice 'out there' removed from human interaction and interpretation, like so many artefacts for the taking.[49]

---

47 'Traditional Knowledge and Ecological Survey = Better Land Management' pp 3-4.

48 *National Strategy for the Conservation of Australia's Biodiversity*, p. 31.

49 J Birckhead '"Traditional Aboriginal Land Management Practices" at CSU - the Cultural Politics of a Curriculum Innovation' *Aboriginal Involvement in Parks and Protected Areas, AIATSI*, 1992, p. 302.

4.71 The Committee recommends:

> (18) **that Recommended Action 6.1.7 of the draft national biodiversity strategy be revised to reflect the complexity and sensitivity of seeking to identify and use traditional Aboriginal and Torres Strait Islander knowledge and practices in biodiversity research and conservation.**

4.72 While the wording should be finalised in consultation with Aboriginal and Torres Strait Islander representatives, the Committee considers that, for example, a more appropriate form of words to replace the first dot point of 6.1.7 might be:

> encouraging indigenous communities to undertake or otherwise collaborate in research projects which utilise traditional knowledge and practices in the study of biodiversity and its conservation.

Subsistence rights

4.73 During renewed debate recently about whether or not indigenous people should be permitted to hunt protected animal species, Mr Bob Weatherall of the Foundation for Aboriginal and Islander Research Action said that to prevent traditional hunting practices is to commit 'cultural genocide'.[50] The submission to the Committee from the Colong Committee presents the view that 'there is a serious threat to biodiversity if indigenous groups are allowed to hunt in the reserved areas'.[51] As Dr John Woinarski warned at the Committee's workshop, there is a 'certain naivety in the acceptance of the belief that Aboriginal aspirations and nature conservations goals are similar'.[52]

4.74 Caring for country is an essential element of Aboriginal culture. Aborigines managed and shaped the land for many thousands of years and argue that, left alone to practice their customs, traditions and religion, they would not over exploit any species. Their right to forage extends to all available species, including introduced species which have replaced native species on the land and in their diets.

4.75 The Committee discussed the issue at length with traditional owners on the Gurig National Park Board of Management, who emphasised their conviction that Aborigines who traditionally use and occupy the land within the national park should be able to hunt and fish in the area and continue to include introduced species in their diet. They also expressed deep concern about the effects of harvesting which is not under their control, especially fishing in the adjacent marine park by commercial operators, tourists and indigenous people from other regions.

---

50 *Age*, 29 December 1992, p. 5.

51 *Submission* No. 3, p. 4.

52 *Workshop*, Canberra, 9 October 1992.

4.76 The Committee agrees that indigenous people have a right to maintain their traditions and practices and that this includes hunting, fishing and gathering for subsistence purposes. It also notes that there is no conclusive evidence that traditional hunting practices in Australia have placed protected species in significantly greater danger of extinction.

4.77 However, the federal government and all state governments are committed to clear principles of environmental policy. They have undertaken not to let lack of full scientific certainty be used as a reason for not taking action. Consistent application of this precautionary principle indicates that it would be unacceptable, having protected a species because it was in danger of extinction, to run the risk of undermining that action by allowing it to be hunted.

4.78 Certainly, Aborigines and Torres Strait Islanders have made far more than their share of compromises in the past 200 years. But the Committee considers that, provided their right to subsistence is recognised as a principle by governments, indigenous people should be prepared to negotiate on how that right is exercised. This could result in, for example, full collaboration in the design, implementation and review of the recovery programs for threatened or endangered species, during which time there is a voluntary moratorium on hunting these species for a specified period.

Protected area management

4.79 The revised draft biodiversity strategy includes provision for action to utilise, where appropriate, the traditional knowledge and skills of Aboriginal and Torres Strait Islanders in the development and implementation of management plans for protected areas.[53]

4.80 Arrangements are being made by conservation management agencies to provide for greater opportunities for indigenous communities to be represented on the management committees of protected areas. However, the New South Wales and Western Australian State Offices of ATSIC have found that:

> Conservation authorities, with the exception of the ANPWS, have been less than effective to date in addressing Aboriginal and Torres Strait Islander concerns in the management of protected areas. By way of example ... it is proposed that Aboriginal people in Western Australia will be included in management committees for protected areas in that State for the first time later this year.[54]

4.81 While suggesting that it would be desirable if all agencies included Aboriginal and Torres Strait Islander representation on management committees, ATSIC reported that where indigenous people are included, their role is advisory and their interests or aspirations are not necessarily accommodated.[55]

---

53 *A National Strategy for the Conservation of Australia's Biological Diversity*, p. 15.

54 *Submission* No. 52, p. 8.

55 *Submission* No. 52, p. 8.

4.82 In contrast, throughout the inquiry the ERA Committee was told of the success of the joint management arrangements at Kakadu and Uluru National Parks and the desirability of using them as models for collaboration in protected area management elsewhere.[56] Nitmiluk and Gurig national parks, established under the aegis of the Northern Territory Government, are the only other jointly managed parks presently in existence but South Australia, NSW, Western Australia and Queensland are actively considering proposals. More than 30 Aboriginal-owned and jointly managed national parks are expected to be in existence within a few years including, for example, the Unnamed Conservation Park and Witjira National Park in South Australia; Lake Mungo and Mutawintji National Parks, Mount Grenfell Historic Site and Mount Yarrowyck Nature Reserve in NSW; Purnululu and Karijini National Parks in Western Australia; and Jardine River, Archer Bend and Lakefield National Parks in Queensland.

4.83 The supporters of this trend point to the degree of control which the traditional owners have in managing the land which has been handed back to them and determining their future. The opponents include those who fear that Aboriginal control will not be in the best interests of nature conservation, and those who consider that joint management imposes landuse and management regimes which undermine Aboriginal autonomy and control.

The ERA Committee met with traditional owners and members of the Guring National Park Board of Management and staff of the Conservation Commission of the Northern Territory at Cobourg Peninsula in August 1992.

56 For example, *Submission* No. 10.

4.84 The jointly managed parks evolved for a variety of reasons and are managed in the context of a complex agenda of social justice issues. The Central Land Council has cautioned against assuming that Aboriginal land is equivalent to conservation land.

> Essentially, protecting biodiversity and maintaining the self-determination of Aboriginal people are two separate, though related issues. The reasons that Aborigines need and want land are numerous but can for the purpose at hand be conveniently grouped under the heading of self-determination. This may in some cases result in Aboriginal people needing to consider biodiversity, albeit from a differing position to that of the ERA Committee. In other cases it may be a peripheral or inconsequential issue. Restated, the alienation of land for Aboriginal people, that would otherwise be of value in conserving biological diversity, cannot be assumed to be equivalent to biodiversity protection.[57]

4.85 Aboriginal-owned and jointly managed parks are not a panacea for conservation issues; nor are they a panacea for land rights issues. Nonetheless, it has been found that the best cooperative relationships occur where the land is held by Aborigines and Aborigines have real decision-making power.[58]

4.86 Commenting on joint management of national parks, Mr Tony Tjamiwa has stated:

> Aboriginal land that is just a national park is like a table with one leg or like a bird. It's not very stable. Shove it and it will fall over. Just one leg is not enough for Aboriginal land. It has to have the other legs there: the leg that Aboriginal Law and ownership provides; that Aboriginal involvement in running the park provides; that an Aboriginal majority on the board of management provides.[59]

4.87 Negotiations between governments and indigenous people concerning protected areas could be transformed as a result of the Mabo decision. While interpretations of the High Courts decision vary, it could make joint management an arrangement which indigenous people offer to governments:

> ... it renders any national park to which Aboriginal or Islander people still have a strong traditional attachment, open to claim under common law, regardless of land rights legislation and regardless of most things the government thinks it has done to legally alienate the land.[60]

4.88 The terms of the joint management agreement in each case should be determined by the communities and government agencies concerned. However, there seems to be consensus among indigenous people that there are certain minimum conditions, and these reflect to a large extent the Uluru/Kakadu model.

4.89 The Uluru and Kakadu arrangements underscore the recommendations which representatives of Aboriginal communities and organisations have made to the Western Australian government as the basis for negotiations concerning national parks. These

---

57 *Submission* No. 55, p. 2.

58 *Submission* No. 55, p. 2.

59 T Tjamiwa (1992) 'Tjunguringkula Waakaripai : Joint Management of Uluru National Park' *Aboriginal Involvement in Parks and Protected Areas*, p. 9.

60 A J Brown 'Claim that Park!' *Aboriginal Law Bulletin* Vol. 2, No. 57, August 1992, p. 2.

were endorsed by the Royal Commission on Aboriginal Deaths in Custody, which in turn also recommended that they be implemented in Western Australia (Recommendation 315). The recommendations made by the Aborigines were:

- the encouragement of joint management between identified and acknowledged representatives of Aboriginal people and the relevant State agency;
- the involvement of Aboriginal people in the development of management plans for National Parks;
- the excision of areas of land within National Parks for use by Aboriginal people as living areas;
- the granting of access by Aboriginal people to National Parks and Nature Reserves for subsistence hunting, fishing and the collection of material for cultural purposes (and the amendment of legislation to enable this, where necessary);
- facilitating the control of cultural heritage information by Aboriginal people;
- affirmative action policies which give preference to Aboriginal people in employment as administrators, rangers, and in other positions within National Parks;
- the negotiation of lease-back arrangements which enable title to land on which National Parks are situated to be transferred to Aboriginal owners, subject to the lease of the area to the relevant State or Commonwealth authority on payment of rent to the Aboriginal owners;
- the charging of admission fees for entrance to National Parks by tourists;
- the reservation of areas of land within National Parks to which Aboriginal people have access for ceremonial purposes; and
- the establishment of mechanisms which enable relevant Aboriginal custodians to be in control of protection of and access to sites of significance to them.[61]

4.90 In responding to the Aboriginal Deaths in Custody report, all governments stated that they supported, and in some cases were implementing, all or most of these measures. The Commonwealth Government pledged to 'seek discussions with States with a view to gaining Australia-wide recognition of these principles and adoption of similar practices in all States'.[62]

4.91 The Committee recommends:

(19) that the Commonwealth seek the support of ANZECC to a policy framework for negotiations between indigenous people and conservation management agencies concerning the management of protected areas, based on Recommendation 315 of the Report of the Royal Commission into Aboriginal Deaths in Custody.

---

61 *Aboriginal Deaths in Custody : Response by Governments to Royal Commission.* p. 1194.

62 *Aboriginal Deaths in Custody : Response by Governments to Royal Commission.* p. 1196.

4.92 Implementation of the policy framework for negotiations between indigenous people and conservation management agencies could be a condition of funding under the protected areas establishment program (Chapter 3).

4.93 Protected areas often contain sites of ritual or spiritual significance to Aboriginal and Torres Strait Islander people, who feel that the management plans should include specific provisions for the conservation of such sites.[63] However, funding for the management of traditional sites and landscapes is not well integrated into the budgets of many conservation agencies. Instead, they are managed on the same basis as sites which occur outside national parks. The Director of the Australian Heritage Commission has observed that:

> Aboriginal sites and landscape are an integral part of Australia's 'natural' landscape. Their professional management is a necessity for our parks and reserve systems; because of the way in which recognition of the values they express will immediately enrich our systems and our appreciation and understanding of them.[64]

4.94 The Committee recommends:

> **(20) that management plans developed for national parks funded under the acquisition and establishment programs for a nationwide ecologically representative core protected area system (recommendations 10 and 12) be required to include provision for the preservation of sites of ritual or spiritual significance to Aboriginal and Torres Strait Islander people where these sites occur in identified core protected areas.**

Conservation of biodiversity on other land owned by indigenous people

4.95 Aboriginal and Torres Strait Islander communities have access to funding for conservation management activities under the National Landcare Program, the Save the Bush Program and One Billion Trees Program, as discussed in the ERA Committee's report, *Biodiversity: The Contribution of Community-based Programs.* The Committee identified a requirement to review these programs to improve their availability and applicability to Aboriginal and Torres Strait Islander people. The need to provide incentives and assistance to landholders to undertake appropriate initiatives to protect biological diversity on their own land has also been recognised in State and Territory government programs.

4.96 In addition, employment programs funded under the Aboriginal Employment Development Policy have been designed to support conservation and land management by indigenous people. These include a program administered by the Bureau of Rural Resources to encourage Aboriginal employment in feral animal control and the game meat harvest industry, and the Contract Employment Program for Aboriginals in Natural and Cultural Resource Management, (CEPANCRM) which is administered by the ANPWS.

---

63 *Submission* No. 52, p. 8.

64 S Sullivan, 'Aboriginal Site Management in National Parks and Protected Areas', *Aboriginal Involvement in Parks and Protected Areas*, pp. 176-177.

4.97 Of the available programs, CEPANCRM is designed specifically to provide direct support to nature conservation projects on Aboriginal held land. However, its primary purpose is to foster employment and training opportunities. Funding is provided to nature conservation agencies and statutory Aboriginal Land Councils to commission work for Aboriginal and Torres Strait Islander communities and individuals under contract.

4.98 For Aboriginal communities which do not seek to establish a jointly managed park, or to provide services under contract to another agency, few medium to long term funding mechanisms are available for land management projects which would contribute greatly to maintaining cultural and biological diversity. The Dhimurru Land Management Corporation in north-east Arnhem Land, for example, is seeking advice, assistance and resources for the infrastructure developments, relevant training, and planning of a reserve:

> We hope the Standing Committee may be prepared to recommend the provision of funds through ATSIC, targeted to supporting Aboriginal controlled conservation and environmental initiatives.[65]

4.99 Moreover, the extent of the land management challenges encountered by Aboriginal communities can require a greater and more sustained commitment of expertise and resources than is usually met by projects funded by CEPANCRM, as Dr Dick Braithwaite has observed:

> The architects of Land Rights for Aboriginal people appear to have given no thought to the subsequent management of Aboriginal land. The land returned is generally degraded with exotic plants and animals. This diminishes its value for traditional use and as traditional use generates little cash (but saves massively in social security costs) there is little capacity to manage the land. Aboriginal people quite reasonably say white people brought these problems and therefore should get rid of them. This problem is still not being satisfactorily addressed by government.[66]

4.100 The report *Caring for Country*, commissioned by the ANPWS and funded by ATSIC to investigate Aboriginal landholders' access to existing land management programs, found a 'fundamental mismatch' between the programs and the needs of Aboriginal land and Aboriginal land managers.

4.101 The Committee notes and agrees with the following two recommendations, among others, of the report:

- that ATSIC encourage its regional councils, Aboriginal communities, land councils, resource agencies and consultants to view land uses and land management as an integral part of regional and community planning;

- that ATSIC assume the role of coordinating other Commonwealth Departments to consider supports for Aboriginal land management, through a task force, working party or other appropriate meeting mechanism. The group of departments concerned:

---

65 *Submission* No. 61, p. 2.

66 *Submission* No. 34, p. 2.

- identify ways of overcoming existing impediments to Aboriginal access to mainstream programs, and monitor progress by departments towards this;

- consider ways of providing for Aboriginal land management needs which are not well met by the existing range of programs; and

- plan mechanisms for continuing communication and coordination at national, regional and local levels.[67]

4.102 In response to the report of the Royal Commission into Aboriginal Deaths in Custody, the Commonwealth Government has agreed to provide, through ATSIC, $60 million over five years for a land acquisition and development program. The funds for 1992-93 have been allocated between the Property Management and Development Program and the Land Acquisition Program. Both programs are under review.

4.103 The emphasis of the new measures will be on purchases for sustainable development which increase community income and provide employment and enterprise opportunities. Only land which can be developed adequately within current funding provisions will be purchased. Community training will be developed and will be provided to communities acquiring land under this scheme. ATSIC is investigating the feasibility of developing a national strategic approach for property management and sustainable development. The Committee strongly endorses the idea.

4.104 The Commonwealth Government has also agreed to provide an additional $10.6 million over five years to CEPANCRM, which is also being reviewed. The ANPWS, through the Aboriginal Programs Section, has consulted extensively with Aboriginal communities about the program and is shortly to produce a report for their consideration. The issues raised during the review concern the administration of the range of forms of assistance to Aboriginal land holders, and include problems with community access, information and control. Changes have already been made to CEPANCRM as a result. The most significant is that communities are now eligible, under certain circumstances, to receive direct funding and thereby be better able to initiate projects.

4.105 The Committee commends the ANPWS in its efforts to respond to the wishes of Aboriginal communities. In some respects it is attempting to provide assistance which is similar to that which would otherwise be provided by the Save the Bush and Landcare programs if the community were able to meet the eligibility criteria. The Committee considers this is an important development which should be clearly recognised in the CEPANCRM program.

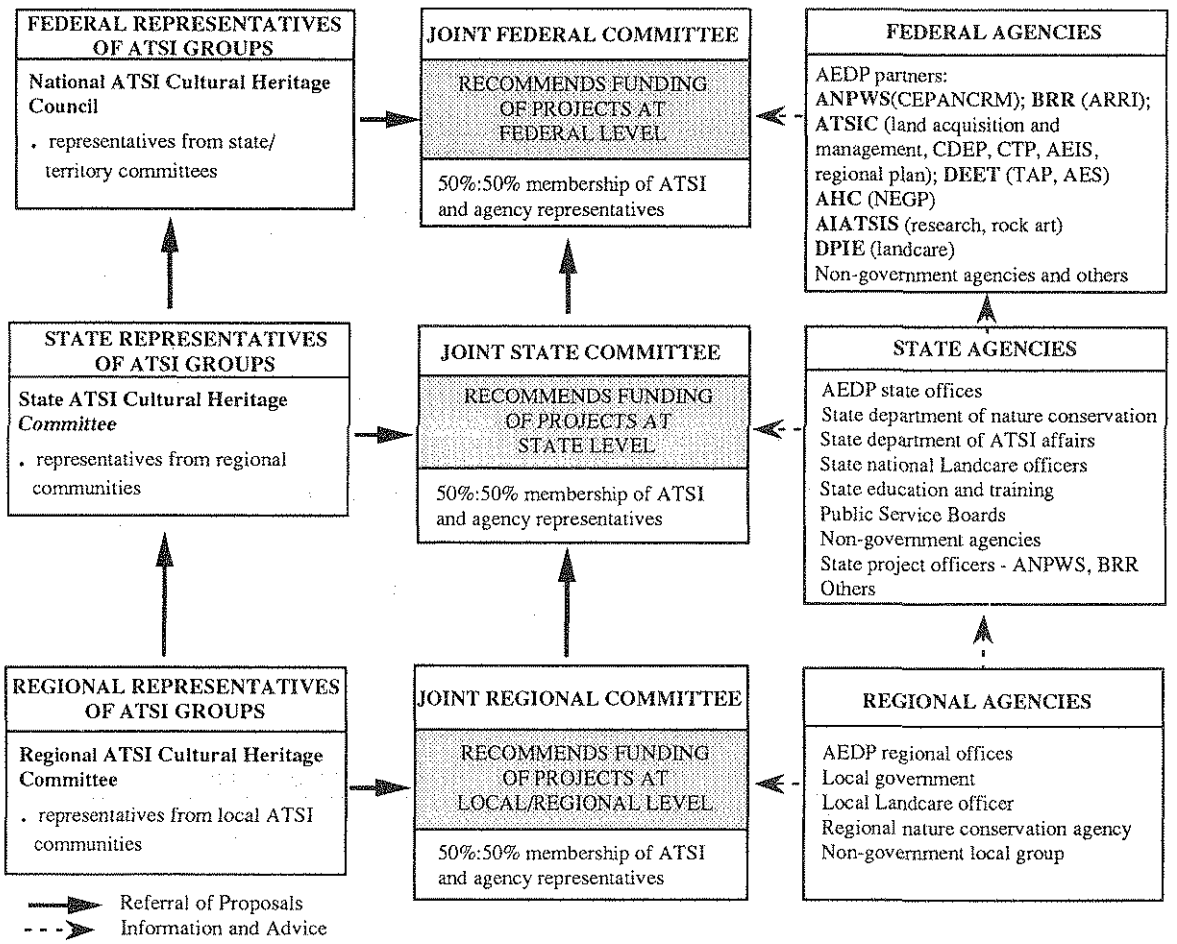
4.106 The Committee recommends:

(21) that either greater weight be given in the CEPANCRM program to conservation management as a goal, or a separate traditional owners' conservation assistance program be established.

---

67 E Young, H Ross, J Johnson, J Kesteven, *Caring for Country: Aborigines and Land Management*, ANPWS, 1991, p. xx.

4.107 As a result of the *Caring for Country* report and the review of CEPANCRM, the Aboriginal Programs Section of the ANPWS has developed, in collaboration with Aboriginal and Torres Strait Islander communities, a model to help with consultation between the communities and government agencies at all levels on a range of related programs. While devised for land and sea management programs, it can be applied to other areas of public administration. Essentially, the model proposes the establishment of working groups at the three levels of decision making: the community/regional level; the state level; and the federal level. The working groups would comprise equal numbers of community and agency representatives and would develop proposals for, or approve as appropriate, projects which are funded from related programs (see *Figure 4*).



AEDP	Aboriginal Employment Development Policy
AEIS	Aboriginal Enterprise Incentive Scheme
AES	Aboriginal Employment Strategy
AHC	Australian Heritage Commission
AIATSIS	Australian Institute of Aboriginal and Torres Strait Islander Studies
ARRI	Aboriginal Rural Resources Initiative
BRR	Bureau of Rural Resources
CDEP	Community Development Employment Program
CTP	Community Training Program
DEET	Department of Employment, Education and Training
DPIE	Department of Primary Industries and Energy
NEGP	National Estates Grants Program
TAP	Training for Aborigines Program

Figure 4. Model for consultation on land management and conservation programs

4.108 The ANPWS is seeking to encourage State/Territory conservation agencies to adopt the model through, for example, negotiations to provide CEPANCRM funds in support of State/Territory Aboriginal Employment Strategies. The Committee considers that the model represents a simple, sensible and equitable approach to targeting the needs of Aboriginal and Torres Strait Islander communities in a way which they have been involved in developing. Its implementation, if successful, could be significant in terms of the achievement of reconciliation and self-determination, especially if it is applied to other policy areas. In addition, it could improve the efficiency as well as the effectiveness of program delivery through a reduction in duplication.

4.109 The potential of the model will not be realised unless a concerted effort is made to test it and, if appropriate, implement it widely. This is presently beyond the resources of the ANPWS and certainly requires the support of all relevant agencies as well as the Aboriginal and Torres Strait Islander communities.

4.110 The Committee recommends:

(22) **that the Commonwealth make a commitment to implement the model of community consultation developed by the Aboriginal Programs Section of the ANPWS by:**

- **forming a task force of Commonwealth agencies which administer relevant land management and conservation programs to develop and establish the model, and to act in due course as the Commonwealth representatives on the joint federal committee;**
- **providing funds to promote the concept nationally; and**
- **approaching the States and Territories with a view to adopting the model on a trial basis in one or two States/Territories in 1993-1994, with full implementation if appropriate the following year.**

John Langmore
Committee Chair

15 January 1993

INTERNATIONAL CONVENTION ON BIOLOGICAL DIVERSITY
Article 8: *In-situ* Conservation

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

(a) establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;

(b) develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity;

(c) regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use;

(d) promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;

(e) promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas;

(f) rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, *inter alia*, through the development and implementation of plans or other management strategies;

(g) establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health;

(h) prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species;

(i) endeavour to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and the sustainable use of its components;

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

(k) develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations;

(l) where a significant adverse effect on biological diversity has been determined pursuant to Article 7, regulate or manage the relevant processes and categories of activities; and

(m) cooperate in providing financial and other support for *in-situ* conservation outlined in subparagraphs (a) to (l) above, particularly to developing countries.

APPENDIX B

RECOMMENDATIONS IN ERA COMMITTEE REPORT, *BIODIVERSITY: THE CONTRIBUTION OF COMMUNITY-BASED PROGRAMS*

1 That funding for the Save the Bush program be immediately increased to $5 million in recognition of its vital contribution in maintaining biodiversity and ecosystem processes and in the implementation of the proposed national biodiversity strategy and the Decade of Landcare, and that funding be increased to $10 million by 1994.

2 That, with a portion of the recommended increased funds for Save the Bush, the ANPWS further develop the research, survey and monitoring component of the program. Studies should focus, in the first instance, on:

(i) *the relationship of area and edge for viable remnants,*

(ii) the value or potential of critical habitats or key species as bioindicators,

(iii) corridor establishment and management practices,

(iv) the relationship of remnants to adjacent land and various grazing regimes.

3 That, with a portion of the recommended increased funds for Save the Bush, the ANPWS further develop the program's extension component on a regional scale which recognises the continuity of biodiversity needs across the landscape.

4 That with additional resources as required, and using the resources of ERIN, the National Index of Ecosystems and Save the Bush, and in consultation with ANZECC, the ANPWS develop a national remnant native vegetation strategy (as a component of the national biodiversity strategy) for a bioregional-landscape approach to integrated planning, and to guide the preparation of regional vegetation management plans. The strategy should take into account the various State and Territory vegetation management programs.

5 That the ANPWS retain organisational and administrative control of the Save the Bush program, and that the Service continue the strategic development of the program.

6 *That the Commonwealth, through wide consultation which should include the CSIRO, the nursery* industry, and the Indigenous Flora and Fauna Association, develop national standards for

(i) revegetation projects,

(ii) the collection and storage of indigenous native plant seed,

(iii) the protection and maintenance of eco-adapted seed stock.

7 That the Commonwealth, through the One Billion Trees program administrators and appropriate scientific and technical advisers, establish regional seed banks or seed orchards at a local or *district level under appropriate guidelines established by implementing recommendation 6.*

8 That funding for the One Billion Trees program be increased to $6 million to provide additional resources for the implementation of aspects of program development identified in recommendations 6 and 7.

9 That a proportion of One Billion Trees program funds be directed to target areas identified in the national biodiversity strategy and in regional vegetation management plans; and in the utilisation of groups such as the Australian Trust for Conservation Volunteers and jobskills programs to implement priority projects.

10 That the Commonwealth implement measures to assess and monitor the long-term multiplier effects of National Soil Conservation Program projects, particularly 'demonstrations,' in rural communities on a bioregional scale, and adjust appropriate sub-program objectives and guidelines as needed to maximise the maintenance and enhancement of ecosystem processes provided by the program.

11 That the National Soil Conservation Program retain its specific focus on soil conservation, but that the program also incorporate objectives which ensure the maintenance of biodiversity and ecosystem processes, in recognising that these underpin long term ecologically sustainable development.

12 That the Commonwealth develop the whole systems approach within the National Soil Conservation Program as a matter of urgency and incorporate the approach in appropriate sub-programs in the Decade of Landcare Plan. This should include a community-based component in a way in which community groups can see their essential, participatory role and contribution within the overall plan.

13 That land capability assessments be completed across the entire Australian landscape as a planning tool for increased and more widespread implementation of whole farm planning within the whole systems approach and ecologically sustainable development as a matter of urgency. Assessments should be widely and locally available to promote increased usage of whole farm planning.

14 That the Commonwealth, State and Territory governments establish a working group, consisting of their own representatives and representatives of other relevant groups, to develop and implement a National Rangelands Strategy as a matter of urgency.

15 That a National Soil Conservation Program sub-program be developed to target and support information needs and community-based action specifically in relation to the maintenance of soil infaunal and microbial diversity in recognition of its vital role in maintaining Australian ecosystems and ecological processes.

16 That the Commonwealth through the Murray-Darling Basin Commission revise and refocus the Natural Resources Management Strategy program with specific objectives for the maintenance of biodiversity and ecosystem processes, and Aboriginal cultural and natural heritage. This process will require closer consultation with all community-group representatives, including Aboriginal communities, in the Murray-Darling Basin.

17 That a bioregional framework be established across the continent for the planning and management of all environmental and natural resource programs. The bioregions should be established through collaboration with all levels of government.

18 That the One-Stop-Shop be further developed so that each program's specific focus is complementary to every other one, without overlap, and each has a single, over-riding principle: the maintenance of biodiversity and ecological processes.

19 That tree planting projects specifically aimed at redressing soil conservation problems be funded by the National Soil Conservation Program, rather than One Billion Trees, and that appropriate additional resources be provided.

20 That on-going integration and streamlining of the application process for all programs through the One-Stop-Shop continue as a matter of urgency. Specific issues which should be addressed *prior to the 1993-94 application round include:*

(i) an adequate, straightforward advertising campaign which clearly identifies all programs for funding community-based activities;

(ii) further development of a user-friendly application form designed also to provide adequate information to assessors; and

(iii) complete revision of the language and layout of the guideline booklets in close consultation with a variety of community groups including Aboriginal representatives.

21 That the Commonwealth develop timetables for the One-Stop-Shop application process and distribution of funds which best serve the needs of community groups to undertake projects on a seasonally and ecologically sound basis to maximise success, and to complement State and Territory government programs. Four timetables should be developed to adequately reflect *project implementation needs in the State/Territories as follows:*

(i) Queensland and the Northern Territory;

(ii) New South Wales and the Australian Capital Territory;

(iii) Victoria, Tasmania and South Australia; and

(iv) Western Australia.

22 That the Commonwealth establish project funding provisions for 3-5 year rolling programs for the four community-based programs. Each program should allow applicants to apply for approval in principle, for up to 3 years funding, with the possibility of extension to a maximum of 5 years. Continued funding should be made contingent on annual reporting or other assessments of satisfactory progress.

23 That the Commonwealth improve funding arrangements and guidelines through the State/Territory governments to ensure appropriate levels, use and direction of funds. Particular attention should be given to the NSCP and NRMS programs. The fundamental criterion should be to maximise *on the ground activity, at a local or regional level.*

24 That the Commonwealth and State/Territory governments collaborate to establish and resource a national network of biodiversity programs facilitators, so that, in each bioregion, an appropriately qualified facilitator is based locally to provide ongoing information support, technical advice and scientific extension to community-based groups on all natural resource programs.

25 That the responsible Commonwealth agencies, in consultation with Aboriginal people, review the funding criteria of the programs to give equal emphasis to land uses of particular economic and social value to Aboriginal people. The review should ensure the availability and applicability of the programs to the land management and conservation needs on Aboriginal land.

26 That the Commonwealth provide additional appropriate resources to enable the ANPWS Aboriginal Programs Unit to further develop its work, particularly as a focal point for contact, *extension and consultation for Aboriginal communities with the four programs referred to in this* inquiry, in addition to other relevant programs.

27 That the Commonwealth allow tax deductibility for donations made to the Australian Rabbit Fund for research into the control and eradication of the rabbit in Australia.

28 That the Commonwealth initiate an inquiry into the adequacy of risk assessment procedures and subsequent controls of imported exotic plants, animals and other organisms.

29 That the Commonwealth and ANZECC, in considering the implementation of a national biodiversity strategy, give priority to the following issues:

(i) public awareness and education;

(ii) eradication strategies for feral animals, particularly rabbits, cats and foxes, and invasive exotic plants;

(iii) assessment and management of vegetation clearing;

(iv) improving the knowledge base on Australia's biodiversity; and

(v) long term ecological monitoring.

30 That the Commonwealth, in the implementation of a national coastal zone management strategy and national biodiversity strategy, develop and implement a Commonwealth funded community-based program that focuses on the maintenance of biodiversity and ecological processes in the maritime, coastal environment.

APPENDIX C

SUBMISSIONS

1	Mr Bruce Wilson
2	Mr Stephen Taylor
3	The Colong Committee Ltd
4	Ecology Research Centre
5	Royal Botanic Gardens Sydney
6	Dr Robert Parsons La Trobe University
7	Mid North Coast Branch National Parks Association of NSW Inc.
8	Dr Dermot Smyth
9	Associate Professor Hugh Ford University of New England
10	Dr Terry De Lacy Charles Sturt University
11	Mr Bruce Baskerville
12	Mr/Ms J S Mugford
13	Mr/Ms W Okera
14	Illawarra Escarpment Coalition
15	Associate Professor Geoff Wescott Deakin University
16	Dr David Doley University of Queensland
17	Dr Roger Epps University of New England
18	Western Australian Municipal Association
19	Mr Quentin Bowers
20	BHP
21	Department of Foreign Affairs and Trade

22 Dr Pamela Parker
Chicago Zoological Society

23 United Farmers and Stockowners of South Australia Incorporated

24 Mr Brian Young

25 Dr P F Berry
Western Australian Museum

26 Mr David Barnes

27 World Wide Fund For Nature

28 Threatened Species Network
Conservation Council of South Australia

29 Capricorn Branch, Wildlife Preservation Society of Queensland and
Byfield Residents Action Group

30 Ms Astrid Herlihy

31 Dr Barbara York-Main
University of Western Australia

32 Mr John Hunwick
The Flinders University of South Australia

33 Dr Jim Hone
University of Canberra

34 Dr Richard Braithwaite
Tropical Ecosystems Research Centre
CSIRO

35 Gold Coast Environment Centre

36 National Farmers Federation

37 Professor Peter Baverstock
University of New England, Northern Rivers

38 Ngaanyatjarra Council (Aboriginal Corporation)

39 Friends of the Earth

40 National Parks Association of the Australian Capital Territory Inc.

41 North Coast Environment Council Inc.

42 Lachlan Valley Branch
National Parks Association of NSW

43 CRA Limited

44 Australian Heritage Commission

45 National Association of Forest Industries Ltd

46 Greening Australia Limited

47 Dr Grahame Webb

48 Professor Paul Adam
The University of New South Wales

49 Wildlife Management Section
Flora and Fauna Branch
Department of Conservation and Environment (Victoria)

50 Research Unit for Biodiversity and Bioresources
Macquarie University

51 NSW Department of Agriculture

52 Aboriginal and Torres Strait Islander Commission

53 CSIRO

54 Conservation Council of Western Australia Inc.

55 Central Land Council

56 Mr David Bass
University of Adelaide

57 Kiama Municipal Council

58 The District Council of Murray Bridge

59 Victorian National Parks Association Inc.

60 Department of Primary Industries and Energy

61 Dhimurru Land Management Corporation

62 The Environment Centre NT Inc.

63 Mrs Jane Blake

64 The Arid Lands Environment Centre

65 Australian National Parks and Wildlife Service

66 *Tasmanian Government*

67 Australian Mining Industry Council

68 The Australian Museum, Sydney

69 Environmental Protection Authority (Western Australia)

70 Northern Territory Government

71 Queensland Government

72 Conservation Council of the South-East Region and Canberra Inc.

73 Dr Adrian Davey
University of Canberra

74 Dr Penelope Greenslade

75 Australian Conservation Foundation and
World Wide Fund for Nature

76 Clinton Lowland Joint Venture

77 Livingstone Shire Council

78 Clinton Titanium Minerals

79 Land Care Resource Centre
Rockhampton

80 Mr Glyn Wyeth

81 Yeppoon Branch
Queensland Commercial Fishermen's Association

82 Department of the Arts, Sport, the Environment and Territories

83 South Australian Government

84 Mr Dennis Long

85 New South Wales Coal Association

86 Australian Heritage Commission
Supplementary Submission

87 Professor Paul Adam
University of New South Wales
Supplementary Submission

88 Associate Professor Geoff Wescott
Deakin University
Supplementary Submission

89 Department of the Environment and Heritage, Queensland
Supplementary Submission

90 World Wide Fund For Nature
Supplementary Submission

91 Department of Primary Industries and Energy
Supplementary Submission

PROGRAM OF INSPECTIONS AND BRIEFINGS

Thursday 7 May 1992

Briefing - Canberra

Mr John Hicks, Australian National Parks and Wildlife Service

Thursday 20 August 1992

Briefing - Canberra

Dr Chris Margules, CSIRO

Monday 11 August 1992

Inspection and Briefings - Canberra

Australian National Parks and Wildlife Service

Monday 31 August 1992

Briefings - Darwin

Northern Land Council
Dr Grahame Webb, wildlife management consultant
Dr Richard Braithwaite, CSIRO

Tuesday 1 September 1992

Inspections and Briefings - Kununurra and Mt Hart

Western Australian Department of Conservation and Land Management

Thursday 3 September 1992

Briefings - Cooinda and Smith Point

Kakadu Park Board of Management
Gurig National Park Board of Management and traditional owners.

Friday 4 September 1992

Briefing - Darwin

Mr Alaric Fisher and Ms Sue Jackson, The Environment Centre NT Inc.

Thursday 10 September 1992

Briefing - Canberra

Dr Pamela Parker, Chicago Zoological Society.

Thursday 17 September 1992

Briefing - Canberra

Ms Anne-Maree Delahunt and Mr Jonathan Miller,
Australian Heritage Commission

Wednesday 23 September 1992

Briefings - Rockhampton

Army, CSIRO, sandmining companies, local government and community representatives

Inspection - Shoalwater Bay army training area

Thursday 24 September 1992

Briefings - Cairns

Wet Tropics Management Agency

Friday 25 September 1992

Briefings and Inspections - Wet Tropics World Heritage Area

Wet Tropics Management Agency, the Queensland Forest Service, and the Malanbarra Tribal Aboriginal Corporation

Friday 9 October 1992

Workshop - Canberra

Workshop on establishing a national system of ecologically representative protected areas. (A list of participants and the workshop program are at Appendices E and F respectively.)

Wednesday 28 October 1992

Briefings and Inspections	-	Brookfield Conservation Park and Murray River National Park South Australian National Parks and Wildlife Service and the Chicago Zoological Society.

Thursday 29 October 1992

Briefings and Inspections	-	Chowilla, Calperum, and Danggali Conservation Park South Australian National Parks and Wildlife Service and the Chicago Zoological Society

Monday 16 November 1992

Briefings and Inspections	-	Sandspit River Forest Reserve, Melaleuca and Strahan, South West Tasmanian World Heritage Area Tasmanian Forestry Commission and the Department of Parks, Wildlife and Heritage

Tuesday 17 November 1992

Briefings and Inspections	-	Gordon River World Heritage Area and Hobart Department of Parks, Wildlife and Heritage and the World Heritage Area Consultative Committee

APPENDIX E

PROTECTED AREAS WORKSHOP PROGRAM

TOPIC 1: A NATIONAL BIOREGIONAL FRAMEWORK FOR THE PLANNING AND MANAGEMENT OF PROTECTED AREAS

Session 1: The regionalisations identified by the Environmental Resources *Information Network for conservation planning on a continental scale.*

Session 2: The mechanisms by which all levels of government can work together to implement a bioregional approach to the planning and management of a nationally representative system of protected areas.

TOPIC 2: PLANNING AND MANAGEMENT WITHIN BIOREGIONS

Session 3: Strategies for ensuring, within each bioregion, the best representation of biodiversity within protected areas.

Session 4: The involvement of the community at large.

Session 5: The involvement of indigenous people, their land and their traditional knowledge and management practices.

TOPIC 3: MULTIPLE USE PROTECTED LANDSCAPES

Session 6: The integration of sustainable development within a national system of ecologically representative protected areas.

Session 7: The applicability of the biosphere reserve model.

APPENDIX F

WORKSHOP PARTICIPANTS

Professor Paul Adam
School of Biological Science
The University of New South Wales

Mr John Blyth
Scientific Adviser
Department of Conservation and Land Management
Western Australia

Dr John Busby
Associate Director
Environmental Resources Information Network
Australian National Parks and Wildlife Service

Mr David Carter
Senior Project Officer
Uluru National Park

Dr Adrian Davey
School of Resource and Environmental Science
University of Canberra

Dr Stewart Davey
Bureau of Rural Resources
Department of Primary Industries and Energy

Dr Terry De Lacy
Director
Johnstone Centre of Parks, Recreation and Heritage
Charles Sturt University

Ms Judy Downey
Land Resources Division
Department of Primary Industries and Energy

Ms Pam Eiser
Australian Committee for the IUCN

Mr Philip Eliason
Deputy Director
National Farmers Federation

Mr Geoffery Ewing
Assistant Director
Landuse, Aboriginal Affairs, Science and Technology
Australian Mining Industry Council

Mr Kelly Gillen
Acting Regional Manager - South West
Department of Conservation and Land Management
Western Australia

Mr Peter Gray
Senior Town Planner
Kiama Municipal Council

Mr Simon Habel
Conservation Officer
World Wide Fund for Nature

Dr Bruce Halliday
Division of Entomology
CSIRO

Mr Theo Hooy
Senior Project Officer, Scientific Audit
Australian National Parks and Wildlife Service

Dr Robert Inns
National Parks and Wildlife Service
South Australia

Mr John Ives
Division of Wildlife and Ecology
CSIRO

Professor Jamie Kirkpatrick
Department of Geography and Resource Management
University of Tasmania

Mr Peter Komidar
Nature Conservation Branch
Department of the Arts, Sport, the Environment and Territories

Mr Michael Krockenberger
Biodiversity Program Coordinator
Australian Conservation Foundation

Mr Bill Logan
Environment and Conservation Division
Department of the Environment, Land and Planning
Australian Capital Territory

Dr Chris Margules
Division of Wildlife and Ecology
CSIRO

Professor Henry Nix
Director
Centre for Resources and Environmental Studies
Australian National University

Ms Margaret Palmer
Director, Environment Bilateral Section
Department of Foreign Affairs and Trade

Dr Pamela Parker
Assistant Director, Conservation Biology
Chicago Zoological Society

Dr Kris Plowman
Consultant in Environmental Planning

Dr Bob Pressey
National Parks and Wildlife Service
New South Wales

Dr Rosemary Purdy
Deputy Chief Executive Officer
Australian Heritage Commission

Dr Trevor Redhead
Institute of Natural Resources and Environment
CSIRO

Mr Paul Sattler
Conservation Planning
Department of the Environment and Heritage
Queensland

Mr Robert See
Land, Heritage and Environment Branch
Aboriginal and Torres Strait Islander Commission

Mr Rick Sinclair
Economic, Environment and Resource Program
National Association of Forest Industries Ltd

Mr Frank Topham
Government Affairs Manager
NSW Coal Association

Dr Andy Turner
Assistant Secretary
Nature Conservation Branch
Department of the Arts, Sport, the Environment and Territories

Dr John Woinarski
Conservation Commission of the Northern Territory

NATIONAL STRATEGY FOR ECOLOGICALLY SUSTAINABLE DEVELOPMENT

December 1992

Part Three - Intersectoral Issues

10. NATURE CONSERVATION SYSTEM

CHALLENGE — To establish across the nation a policy framework for the protection and management of nature conservation values, both inside and outside areas protected under legislation (i.e. protected areas), consistent with ESD principles.

STRATEGIC APPROACH — This will be approached by continuing to develop and enhance natural resource inventories and valuations of areas with conservation values; clarify, rationalise and publish the categories of protected areas; establish criteria and measures for the access and use of those categories of protected areas; and develop criteria and processes for changes in the status of protected areas.

OBJECTIVE 10.1	to establish across the nation a comprehensive system of protected areas which includes representative samples of all major ecosystems, both terrestrial and aquatic; manage the overall impacts of human use on protected areas; and restore habitats and ameliorate existing impacts such that nature conservation values are maintained and enhanced.

Governments will:

- Use ANZECC as the primary forum for coordination of all nationwide nature conservation functions.

- Through ANZECC, in consultation with other Ministerial Councils and relevant interest groups:

  - clarify and publish the categories of protected areas;

  - jointly rationalise the existing categories of protected areas; and

  - report on programs to acquire scientific knowledge related to the habitat requirements of species and their tolerance to natural and human induced stresses on the biophysical environment.

- Establish criteria and processes for:

  - access and use of protected areas which are clearly consistent with the principles and objectives of ESD;

  - determination of new protected areas; and

  - changes in the status of protected areas.

- Develop measures to facilitate nature conservation on privately-owned land.

- Encourage enhanced public involvement and awareness in the planning, management, monitoring and review of Australia's conservation values and protected areas.

- Continue to develop and enhance natural resource inventories and valuations of areas with conservation values.

- At the Commonwealth level, and following consultation with States and Territories, finalise other national initiatives in relation to weeds, vertebrate pests and the Ocean Rescue 2000 Program.

- Give consideration to work being undertaken by ANZECC, in consultation with relevant Ministerial Councils on development of a national approach to the protection of rare, vulnerable and endangered species, as outlined under Schedule 9 of the IGAE:

  - ensure this work takes into account the preparation of an 'Australian National Strategy for the Conservation of Species and Communities Threatened with Extinction' by the Commonwealth's Endangered Species Advisory Committee.

- Ensure close linkages are maintained with actions outlined under Section 9 of this Strategy - Biological Diversity.