AUSTRALIAN NATIONAL PERIODIC REPORT

SECTION II

Report on the State of Conservation of the Central Eastern Rainforest Reserves of Australia

1

II.1. INTRODUCTION

a. State Party

Australia

b. Name of World Heritage property

Central Eastern Rainforest Reserves of Australia (CERRA)

c. Geographical coordinates to the nearest second

The nominated property consists of a number of reserves lying along the coast and sub coast of mid-eastern Australia, principally along the Great Escarpment, between latitudes 26°46° and 32°15°S and longitudes 151°28° and 153°20°E.

d. Date of inscription on the World Heritage List

CERRA was inscribed on the World Heritage List in 1986 and was subsequently expanded and re-inscribed in 1994. The World Heritage criteria current in 1994 and against which CERRA was listed remain the formal criteria for this property.

e. Organisations responsible for the preparation of the report

Environment Australia in conjunction with NSW National Parks and Wildlife Service and Queensland Parks and Wildlife Service.

II.2 STATEMENT OF SIGNIFICANCE

Criteria

Natural – i, ii, iv

- be outstanding examples representing major stages of the Earth's history, including the record of life, significant ongoing geological processes in the development of landforms, or significant geomorphic or physiographic features; and
- be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh-water, coastal and marine ecosystems and communities of plants and animals; and
- contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Justification for listing

In 1986, a number of rainforest reserves located on the Great Escarpment of eastern New South Wales, known as the Australian East Coast Sub-tropical and Temperate Rainforest Parks were inscribed on the World Heritage list for their outstanding natural universal values:

- as an outstanding example representing major stages of the earth's evolutionary history;
- as an outstanding example representing significant ongoing geological processes and biological evolution; and
- containing important and significant habitats for the in-situ conservation of biological diversity.

Large extensions, including reserves in south-east Queensland, were listed in 1994 under the new title of the Central Eastern Rainforest Reserves (Australia). Rainforest occurs in NSW and south east Queensland as discontinuous patches like a chain of islands in a sea of fire-prone eucalypt forest and agricultural lands. These patches range in size from tiny gully stands to lush forests covering large valleys and ranges. The Central Eastern Rainforest Reserves include the most extensive areas of subtropical rainforest in the world, large areas of warm temperate rainforest and nearly all of the Antarctic beech cool temperate rainforest.

Rainforest once covered most of the ancient southern supercontinent Gondwana and remains the most ancient type of vegetation in Australia. The Central Eastern Rainforest Reserves provide an interesting living link with the evolution of Australia and hence a record of the past. Few places on earth contain so many plants and animals whose ancestors can be traced through the fossil record and today remain relatively unchanged. There is a concentration of primitive plant families that are direct links with the birth and spread of flowering plants over 100 million years ago, as well as some of the oldest elements of the world's ferns and conifers.

A range of geological and environmental influences in the Central Eastern Rainforest Reserves determines where forest communities grow. As these change in the future, so will the forest mosaic, it is an ongoing process that has been occurring for millions of years.

High waterfalls crashing into steep gorges are spectacular examples of the important ongoing natural process of erosion. Erosion by coastal rivers created the Great Escarpment and the steep-sided caldera of the Tweed Valley surrounding Mount Warning. Once, this towering mountain was the buried plug of an ancient vast volcano. Today, rainforest grows on the fertile, well-watered soils that remain.

The evolution of new species is encouraged by the natural separation and isolation of rainforest stands. Many plants and animals found in the property are locally restricted to a few sites or occur in widely separated populations.

Although rainforests cover only about 0.3 % of Australia, they contain about half of all Australian plant families and about a third of Australia's mammal and bird species. The Central Eastern Rainforest Reserves have an extremely high conservation value and provide habitat for more than 200 rare or threatened plant and animal species. The distributional limits of several species and many centres of species diversity occur in the

property. The Border Group is a particularly rich area with the highest concentration of frog, snake, bird and marsupial species in Australia.

The current listing of the Central Eastern Rainforest Reserves includes approximately 50 separate reserves located between Newcastle and Brisbane. It is a serial listing, with only areas of reserved Crown land being listed. These reserves are managed principally by five different agencies: the NSW National Parks and Wildlife Service, the Qld Environment Protection Agency, the Qld Corrective Services Commission and Department of Natural Resources and Mines (Qld) and the Rabbit Board (Qld).

A strategic overview for management of the Central Eastern Rainforest Reserves (http://www.ea.gov.au/heritage/awh/worldheritage/sites/cerra/strategicoverview/index.h tml) has been prepared to assist the agencies manage the area in a coordinated, consistent and cooperative manner and ensure the integrity of its values is protected.

Exploring the World Heritage Rainforests in the Central Eastern Rainforest Reserves is easy, with many of the reserves readily accessible from major towns by sealed or graded gravel roads. A range of visitor facilities is provided at most reserves. Parts of some reserves in NSW have been declared as wilderness and access roads, facilities, lookouts and marked walking tracks are provided only on their boundaries.

General Statistics

The total area of the Central Eastern Rainforest Reserves is 366 703 ha (59 529 ha in Queensland, and 307 174 ha in New South Wales).

The types of rainforest found in the property: cool temperate rainforest; warm temperate rainforest; subtropical rainforest; and dry rainforest.

There are approximately 2 000 000 visitors per year to the area.

Indicative World Heritage Values Table

The *Environment Protection and Biodiversity Conservation* Act 1999 prohibits actions that have "a significant impact on the World Heritage values of a declared World Heritage property" unless the action is approved or in accordance with an accredited management plan. The World Heritage values of the property are the natural heritage contained in the property, which have the same meaning given in the World Heritage Convention.

The following indicative World Heritage values table includes examples of the World Heritage values for which the Central Eastern Rainforest Reserves of Australia was listed for each World Heritage List criterion. These are, in the Commonwealth's view, the statement of the outstanding universal values of each World Heritage property. While these examples are illustrative of the World Heritage values of the property, they do not necessarily constitute a comprehensive list.

Natural criteria against which the Central Eastern Rainforest Reserves (Australia) was inscribed on the World Heritage List in 1994 following extension of the original area listed in 1986.	Examples of World Heritage values of the Central Eastern Rainforest Reserves (Australia) for which the property was inscribed on the World Heritage List in 1994 following extension of the original area listed in 1986.	
Criterion (i) outstanding examples representing the major stages of the earth's evolutionary history.	 The Central Eastern Rainforest Reserves preserve outstanding examples of ecosystems and taxa from which modern biota are derived, including some of the oldest elements of the world's ferns from the Carboniferous period, one of the most significant centres of survival for Araucarians, an outstanding record of Angiosperms, an outstanding number of the oldest lineages of the <i>Corvida</i> (one of the two major groups of true songbirds that evolved in the Late Cretaceous), and outstanding examples of other relict vertebrate and invertebrate fauna from ancient lineages linked to the break-up of Gondwana. The World Heritage values include: rainforests which are exceptionally rich in primitive and relict species, many of which are similar to fossils from Gondwana; subtropical rainforest habitat; warm temperate rainforest habitat; ancient ferns and tree ferns; conifers (e.g. hoop pine) and cycads; primitive groups within Magnoliales and Laurales (e.g. pepper bushes, sassafras, <i>Trimenia, Wilkiea, Cryptocarya, Litsea</i>); primitive groups within Rosidae and Dillenidae (e.g. coachwood, Antarctic Beech, <i>Eucryphia jinksii</i>, turnipwood, <i>Pittosporum</i>, most common in warm temperate and subtropical rainforest types); primitive group of Corvida (such as lyrebirds, rufous scrub-bird, bowerbirds and tree-creepers); other birds dating from Gondwana (e.g. logrunner, thornbills, scrubwrens and gerygones); frogs in the families Myobatrachidae and Hylidae; reptiles such as chelid turtles, leaf-tailed gecko and angle-headed dragon; monotremes and marsupials; and invertebrate fauna with origins in Gondwana, including fresh-water crays, land snails, velvet worms, mygalomorph spiders, flightless carabid beetles, bird-wing butterfly and glow-worms. ecosystems and taxa thich demonstrate the origins and rise to dominance of cold-adapted/dry-adapted flora, including: cool temperate rainforest habitat; dry	
Criterion (ii) outstanding examples representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment.	 The Central Eastern Rainforest Reserves provides outstanding examples of ongoing geological processes associated with Tertiary volcanic activity, and of biological evolution. The World Heritage values include: the caldera of the Tweed Shield Volcano is considered one of the best preserved erosion caldera in the world and is notable for its size, its age (20 million years), and for the presence of a prominent central mountain mass with all three stages of the erosion of shield volcanoes (the planeze, residual and skeletal stages); centres of endemism where ongoing evolution is taking place; flora and fauna of low dispersal capability that occur in more than one isolated pocket of the Central Eastern Rainforest Reserves; plant taxa that show evidence of relatively recent evolution, including: genera in Southern Hemisphere families (e.g. Winteraceae, Monimiaceae and Lauraceae in the Magnolidae, Proteaceae, Cunoniaceae, Euphorbiaceae Escalloniaceae Davidsoniaceae Pittosporaceae Myrtaceae 	

Natural criteria against which the Central Eastern Rainforest Reserves (Australia) was inscribed on the World Heritage List in 1994 following extension of the original area listed in 1986.	Examples of World Heritage values of the Central Eastern Rainforest Reserves (Australia) for which the property was inscribed on the World Heritage List in 1994 following extension of the original area listed in 1986.
	 Euphorbiaceae, Escalloniaceae, Davidsoniaceae, Pittosporaceae, Myrtaceae and Sapindaceae in the Rosidae and, Elaeocarpaceae, Sterculiaceae and Ebenaceae in the Dillenidae); and monotypic endemic families (e.g. Akaniaceae and Petermanniaceae); animal taxa that show evidence of relatively recent evolution, including: 3 species of frogs in the myobatrachid genus <i>Pseudophryne</i> believed to have diverged in the Pliocene; species of frogs in the relict genus <i>Philoria/Kyarranus</i> and the <i>Litoria pearsoniana/ phyllochroa</i> complex; reptiles such as <i>Eulamprus</i> spp; and invertebrates such as snails, earthworms, crays, velvet worms and carabid beetles, including taxa that show overlap and intergradation of different faunal elements (e.g. ants and dung beetles) and the diversity of plant and animal species.
Criterion (iv) contain the most important and significant habitats where threatened species of plants and animals of outstanding universal value from the point of view of science and conservation still survive.	 and important natural habitats for species of conservation significance, particularly associated with rainforest which once covered much of the continent of Australia and is now restricted to archipelagos of small areas of rainforest isolated largely by sclerophyll vegetation and cleared land. The World Heritage values include: habitats associated with: subtropical rainforest; wet sclerophyll forest; montane heathlands; rocky outcrops; and ecotones between rainforest and sclerophyll communities; plant taxa of conservation significance (more than 200 plant taxa, particularly in the families Proteaceae, Myrtaceae and Euphorbiaceae and including species of <i>Cryptocarya</i>, <i>Tasmannia</i> and <i>Endiandra</i>); species of vertebrate fauna of conservation significance (including at least 80 taxa such as Albert's lyrebird, rufous scrub-bird, marbled frogmouth, eastern bristlebird, black-breasted button quail, <i>Philoria/Kyarranus</i> spp., pouched frog, barred frogs, parma wallaby, yellow-bellied glider, Hastings River mouse, New Holland mouse, fawn-footed melomys and golden-tipped bat); and • species of invertebrate fauna of conservation significance (such as the Richmond River bird-wing butterfly and <i>Euastacus jagara</i>).

II.3 STATEMENT OF AUTHENTICITY/INTEGRITY

Authenticity / Integrity

At the time of inscription, the condition of the Property ranged from pristine to various stages of regeneration resulting from a range of human activities. Since this time, there have been active management actions including weed control, regeneration, rainforest rehabilitation, research and monitoring.

There have been no clearing operations in the Property since listing. There have been several wildfires with no adverse effects on World Heritage values.

The legislative basis has been maintained to protect World Heritage values. There have been changes in tenure that have enhanced the protection of the World Heritage areas and adjacent land.

Maintenance of values

There is legislative protection to ensure the maintenance of World Heritage values. Significant funding is provided from Commonwealth and State agencies for maintaining World Heritage values.

Boundaries and buffer zones

CERRA comprises nearly 50 reserves ranging in size from 11 ha to about 100, 000 ha. Tenure includes national park, nature reserve, flora reserve, State forest, forest reserve and other Crown reserves. Boundaries of the property are illustrated on Map 1 and the individual reserves are listed below.

Since the World Heritage listing of CERRA, there have been major tenure changes in the surrounding landscape. As a result, most flora reserves that were previously managed by State Forests of NSW (SFNSW) were revoked and incorporated into new or existing national parks and nature reserves, managed by the NSW NPWS. In Queensland, all State Forests in the CERRA property have been converted to Forest Reserve, as a holding tenure, prior to being added to the protected area estate.

Whilst the boundaries of the World Heritage Property have not changed, the boundaries of some of the reserves have been extended. This has led to enhanced protection of the World Heritage Property.

Reserve name	Approximate areas (hectares)		
New South Wales			
National parks managed by NSW National Parks and Wildlife Service (NPWS)			
Border Ranges (part)	31508		
Mebbin (part)	11		
Nightcap (part)	4945		
Mount Warning	2380		
Koreelah (part)	769		
Mount Clunie (part)	485		
Mount Nothofagus (part)	650		
Toonumbar (part)	1225		
Tooloom (part)	1665		
Richmond Range (part)	870		
Mallanganee	222		
Washpool (part)	27715		
Gibraltar Range (part)	17273		
New England (part)	30115		
Cunnawarra (part)	270		
Dorrigo (part)	7885		
Oxley Wild Rivers (part)	102820		
Werrikimbe (part)	25578		

Land Tenure of CERRA (June 2002)

Reserve name	Approximate areas (hectares)
Willi Willi (part)	1610
Mt Royal (part)	230
Barrington Tops (part)	39193
Nature reserves managed by N	IPWS
Limpinwood	2646
Numinbah	858
Captains Creek (part)	380
Iluka	136
Mount Hyland (part)	1636
The Castles	2360
Mount Seaview	1703
Flora reserve managed by Stat	te Forests of NSW (SFNSW)
Amaroo	36
TOTAL	307174

Reserve name	Approximate areas (hectares)		
Queensland National parks managed by Queensland Parks and Wildlife Service (QPWS)			
Springbrook (part)	2480		
Lamington	20569		
Mount Chinghee	1257		
Mount Barney (part)	10831		
Main Range	17794		
Conservation parks managed by QPW	VS		
Spicers Gap	6		
Forest Reserves managed by Queensland Parks and Wildlife Service (QPWS)			
Goomburra (part)	2067		
Spicers Gap (part)	257		
Gilbert (part)	84		
Emu Vale (part)	268		
Gambubal (part)	2260		
Teviot (part)	390		
Burnett Creek (part)	1076		
Rabbit Board paddock reserves mana Moreton Rabbit Board (DNR&M)	ged by Darling Downs—		
R475 (Res 5740)	22		
R470 (Res 11.135)	40		
R603 (Res 3934)	36		
R464 (Res 11.108)	26		
R489 (Res 929)	18		
Reserves for prison purposes managed Services Commission	by Queensland Corrective		
R932 (Res 12018)	6		
R547 (Res 2678)	42		
TOTAL	59529		

II.4 MANAGEMENT

National Legislation and Controls

As a State Party to the World Heritage Convention the Commonwealth Government has an international obligation to ensure the protection, conservation, rehabilitation and presentation of the area and its transmission to future generations.

Australia has enacted legislation to implement its obligations under the World Heritage Convention. This is provided for under new Commonwealth legislation, the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act). This legislation came into effect on 16 July 2000. The EPBC Act ensures the protection of World Heritage by providing a direct link to Australia's obligations under the World Heritage Convention. The provisions of the EPBC Act replaced indirect triggers for Commonwealth environmental impact assessment with direct triggers that focus the Commonwealth's involvement on matters of national environmental significance including World Heritage properties.

Under the EPBC Act, an action that will or is likely to have a significant impact on World Heritage values may be taken only if the action is approved by the Commonwealth Environment Minister or is taken in accordance with a management plan accredited by the Commonwealth Environment Minister. In order to obtain an approval, the proposal must be referred to the Commonwealth for environmental impact assessment through either a Commonwealth impact assessment process or an accredited State regime. Under the Act, the onus is on the person who takes or is considering taking an action to ensure that it will not have a significant impact on World Heritage. Substantial civil and criminal penalties can apply for breaches of the Act.

The regulations to the EPBC Act prescribe Australian World Heritage Management Principles. These principles will guide decision-making by Commonwealth agencies, including decisions by the Commonwealth Environment Minister on whether to accredit State Government processes and management plans for CERRA reserves.

State Legislation and Controls

Queensland

National Parks are administered by the Queensland Parks and Wildlife Service (an entity of the Environmental Protection Agency) as two classes of protected area under the *Nature Conservation Act* 1992. This Act provides for twelve classes of protected areas, each with stated management principles.

Under Section 17 of the Act, a National Park must be managed to:

- provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and the protection of the area's cultural resources and values;
- present the area's cultural and natural resources and their values; and
- ensure that the only use of the area is nature-based and ecologically sustainable.

Under Section 20 (Management principles of Conservation Parks), a Conservation Park is to be managed to:

- conserve and present the area's natural and cultural resources and their values; and
- provide for the permanent conservation of the area's natural condition to the greatest possible extent; and
- ensure that any commercial use of the area's natural resources, including fishing and grazing, is ecologically sustainable.

The Queensland Parks and Wildlife Service also administers Forest Reserves under the provisions of the *Nature Conservation Act* 1992 and the *Forestry Act* 1959. Forest Reserve is an interim holding tenure, established under the Nature Conservation Act, for land that was previously State Forest and is proposed to be dedicated as protected area (primarily National Park or Conservation Park). This status prevents commercial logging taking place while a range of issues (particularly those relating to existing recreational uses, long-term authorities/leases and native title) is resolved.

The provisions of the Forestry Act continue to apply to a Forest Reserve as if it still were a State Forest. However, commercial logging is constrained and there is a capacity to constrain the use of the land further by applying the management principles of the class of protected area that the land is expected to become. Forest Reserves are effectively parks-in-waiting and are managed accordingly.

More than 99.6% of the CERRA land in Queensland is National Park, Conservation Park or Forest Reserve. The remaining 0.4% is Reserve for Prison Purposes, Rabbit Board Paddock Reserve or Road Reserve. These reserves are administered by trustees. The latter three categories of Crown reserves are administered under the provisions of the *Land Act 1994*. Three categories of Crown reserve are included in CERRA – two reserves are declared as prisons under the *Corrective Services Act 1988* and form buffers to the Palen Creek Correctional Centre; five reserves are formally declared as Rabbit Board paddocks under the *Rural Lands Protection Act 1985*; in addition, there are small areas of road reserve adjacent to some reserve already part of CERRA

Under the *Nature Conservation Act*, if an area has been included in the World Heritage List, the Queensland Minister for the Environment may propose that the whole or part of the area be declared a World Heritage Management Area. Before a World Heritage Management Area is declared, a management plan for the area must be approved. This ensures that all landholders involved are made aware of any implications and establishes the commitment of the State to manage the area. Designation of a World Heritage Management Area would establish precedence of the *Nature Conservation Act* over other statutes, such as the *Forestry Act* or *Land Act*, to the extent of any conflict between the statutes.

A World Heritage Management Area is to be managed to:

- meet international obligations in relation to the area;
- protect the area's internationally outstanding cultural and natural resources and its biological diversity; and
- transmit the area's world heritage values to future generations.

New South Wales

The NSW National Parks and Wildlife Service (NPWS) is responsible for administering the *National Parks and Wildlife Act* 1974, *Wilderness Act* 1987 and *National Parks and Wildlife Amendment Act* 2001. These Acts cover the protection and management of areas such as National Parks, Nature Reserves and Wilderness.

The following general purposes relate to the management of National Parks in NSW:

- the protection and preservation of the scenic, natural and cultural features;
- the conservation of wildlife;
- the maintenance of natural processes as far as possible;
- the provision of appropriate recreational opportunities; and
- the encouragement of scientific and educational inquiry into environmental features and processes, prehistoric and historic features, and park use patterns.

Nature Reserves have a more specific function compared to National Parks. For example, the provision of recreation facilities is not a primary objective of Nature Reserves. They are dedicated for the purposes of:

- the care, propagation, preservation and conservation of wildlife;
- the care, preservation and conservation of natural environments and natural phenomena;
- the study of wildlife, natural environments and natural phenomena; and
- the promotion of the appreciation and enjoyment of wildlife, natural environments and natural phenomena.

Parts of some reserves in CERRA are declared as wilderness under the *Wilderness Act*. Management principles of Wilderness Areas, as provided in this Act, are to restore and protect the unmodified state of the areas, to preserve its capacity to evolve in the absence of significant human interference, and to permit opportunities for solitude and appropriate self-reliant recreation. Wilderness Areas are declared in Limpinwood Nature Reserve, and in Border Ranges, Washpool, Gibraltar Range, New England, Oxley Wild Rivers, Werrikimbe and Barrington Tops National Parks.

Flora Reserves are administered by State Forests of NSW (SFNSW) under the *Forestry Act* 1916. Flora Reserves are areas of State Forests that are set aside to provide long-term protection for stands that are of particular interest and that act as reference stands of particular vegetation types. Management aims to preserve native flora and associated fauna with a minimum of human disturbance.

Management Arrangements

The *CERRA Strategic Overview*, November 2000 provides a management vision, management background and regional setting, describes the values, outlines threats, and deals with key management principles and outlines strategic management objectives.

Extensive consultative measures are undertaken for both statutory and operational planning. This includes advisory committees, public consultation, volunteer programs, traditional owners, indigenous groups, stakeholder consultation and reference groups.

Formal Joint Management Measures

None at present

Management Planning

The *CERRA Strategic Overview for Management* is a major element in guiding cooperative management by the three Governments in relation to the protection, conservation and presentation of CERRA until 2007 when it will be jointly reviewed.

The following Table outlines the current status of management plans for relevant reserves within the CERRA property.

RESERVE NAME	STATUS OF MANAGEMENT PLAN		
<i>New South Wales</i> National parks & nature reserves			
Border Ranges NP Nightcap NP Limpinwood NR Numinbah NR	Joint plan of management adopted 1989. New joint plan in preparation.		
Mount Warning NP	Plan of management adopted 1985 – currently being revised		
Toonumbar NP	Management Plan in preparation – currently on exhibition		
Tooloom NP	Plan of management adopted 2000		
Gibraltar Range NP	Plan of management adopted 1981 – currently being revised		
Washpool NP Gibraltar Range NP	Joint draft plan of management exhibited in 1989. New joint plan in preparation.		
New England NP	Plan of management adopted 1990		
Dorrigo NP	Plan of management adopted 1998		
Barrington Tops NP	Draft plan exhibited in 1989		
Iluka NR	Plan of management adopted 1997		
Oxley Wild Rivers NP	Draft plan in preparation		
Werrikimbe NP	Draft plan in preparation		
Captains Creek NR	Draft plan in preparation		
Cunnawarra NP	Draft plan in preparation		

RESERVE NAME	STATUS OF MANAGEMENT PLAN
Koreelah NP	Draft plan in preparation
Mallanganee NP	Draft plan in preparation – currently on exhibition
Mebbin NP	Draft plan in preparation – currently on exhibition
Mount Clunie	Draft plan in preparation
Mount Nothofagus NP	Draft plan in preparation
Mount Seaview NR	Draft plan in preparation
Richmond Range NP	Draft plan in preparation
The Castles NR	Draft plan in preparation
Willi Willi NP	Draft plan in preparation
Flora reserves	
Amaroo	Working plan approved and mining excluded in 1987
Queensland - National Parks	
Springbrook	Draft plan exhibited in 1999
	Final plan in preparation
Lamington	Draft plan exhibited in 1999
	Final plan in preparation
Main Range	Management Strategy in preparation
Mount Barney	Management Strategy in preparation

Changes in Ownership and/or Legal Status

There have been no changes in ownership. There are a number of outstanding Native Title claims on the Property: see <u>www.nntt.gov.au</u>

Contact Details

NSW National Parks and Wildlife Service Director Northern NSW National Parks & Wildlife Service Locked Bag 914 Coffs Harbour NSW 2450

Queensland Parks and Wildlife Service Regional Service Director (Southern) Queensland Parks & Wildlife Service PO Box 64 Bellbowrie QLD 4070

Staffing, Financial and Training Resources

All Park staff are employed under the *Public Sector Employment and Management Act* 2002 (New South Wales) and the *Public Service Act* 1996 (Queensland) with their general duties being to assist the Director in carrying out his or her functions under the Act. NSW and QLD are committed to the principles of equal employment opportunity

13

and follow the guidelines set out_in their respective Occupational Health and Safety Acts and encourage industrial democracy in the workplace.

Funding resources are provided by State and Commonwealth agencies to carry out priority issues but some threatening processes are by necessity not able to be adequately addressed. Some examples include weed and pest control, rehabilitation of degraded areas and systematic monitoring and research.

Scientific and Technical Studies

Each year approximately 200 - 300 scientific and technical studies are undertaken in the CERRA area, with a number of new discoveries taking place.

Some notable examples include the recent discovery of the 'nightcap oak' (*Eidothea sp*) in far northern New South Wales and of a new population of the endangered Hastings River Mouse (*Pseudomys oralis*) in the Border Ranges National Park.

Studies are undertaken by a wide variety of individuals and organisations including universities, State and Commonwealth agencies and corporate bodies. A recent example of a major study with significant relevance to the CERRA property is *CERRA Invertebrates – A Taxonomic and Biogeographic Review of the Invertebrates of CERRA World Heritage Area, and Adjacent Regions* by Geoff Williams (2002), published by the Australian Museum.

The newly established CERRA Technical and Scientific Advisory Committee has identified the development of a research and monitoring strategy for the property as a priority issue, along with continued values inventory work and consideration of the property boundaries with a view to extending the listing.

Visitation

Queensland – Approximately 1.4 million visitors per year.

New South Wales - Approximately 0.6 million visitors per year.

Education, Interpretation and Awareness Raising

As part of implementation of the Strategic Overview, a whole of property approach has been undertaken for education, interpretation and awareness raising. This has included the employment of an Executive Officer, joint workshops for interpretation staff, common standards of presentation, education programs and websites.

A notable example in NSW is the Dorrigo Rainforest Centre, which has a major interpretive display, provides literature and conducts Discovery tours with World Heritage themes.

In Queensland, the Woonoongoora World Heritage Room at the Green Mountains section of Lamington National Park has an interpretive display and works closely with volunteers and ecotourism operators to interpret the World Heritage area.

Identification of Gaps and Management Needs

The strategic management issues as identified in the Strategic Overview are:

- uncontrolled or inappropriate use of fire;
- inappropriate recreation and tourism activities;
- invasion by pest species; and
- loss of biodiversity.

These issues are being addressed through funding and management priorities.

II.5 FACTORS AFFECTING THE PROPERTY

Threats

Like many protected areas, CERRA faces a range of threats to its immediate and longterm integrity. These threats vary greatly in scale from an instance of incompatible land use on an adjoining property through to global climate change. Threats that are of strategic importance to the overall integrity of CERRA's World Heritage values require a strategic, coordinated and, where possible, consistent approach by the management agencies. Threatening processes that are specific to particular locations will, more appropriately, be dealt with in the context of management planning for each reserve. Threats such as the impacts of human enhanced climate change, on which the management agencies have limited influence, are considered to be beyond the scope of this document.

The disjunct nature of the property also means it has many neighbours. In addition to adjacent national parks and other reserves, CERRA's neighbours include numerous private holdings regulated by 28 different local government areas. Properties adjoining CERRA with prominent vantage points are highly valued and under pressure for residential and tourist development. Such development has the potential to diminish the scenic values for others. The diversity of local government zonings and policies creates the potential for inconsistency in planning processes that in turn could lead to incompatible development or land use at the property's boundary.

Urbanisation and increasing population increase the risk of the threats to the World Heritage area. The strategic threats fall into four categories:

- uncontrolled or inappropriate use of fire;
- inappropriate recreation and tourism activities, including the development of tourism infrastructure, under the increasing visitor pressure from Australia, overseas and commercial ventures;
- invasion by pest species including weeds, feral animals and fungal pathogens; and
- loss of biodiversity at all levels.

Each of these factors is considered a potential threat to the ongoing viability of CERRA's World Heritage values. Wilderness areas provide protection against large scale impacts from each of these threats. Any significant diminution of wilderness condition therefore could threaten the integrity of CERRA's ecological World Heritage values.

The following table focuses on the high risk elements of the four strategic threats to the World Heritage Property.

Threats	Internal / External	Scale of Risk	Cumulative	Natural / Human induced	Able to mitigate
Fire	External – incursion from neighbouring fires. Internal – inappropriate fire regimes	Medium – high likelihood with generally low consequence to WH values	Yes – fire frequency and intensity key factors. Species or ecosystem dependant	Human – highest source of ignition	Yes – with appropriate legislation, management tools and enforcement
Recreation	External	Generally low but high at activity / access nodes	Yes	Human – variety of recreational uses	Yes – with appropriate legislation, management tools and enforcement
Pest Species	External – once established inside reserves becomes an internal problem	Likelihood and consequence of pest species impacts - high	Yes	Human initially with natural dispersal	Limited by necessity to action at landscape scale – particularly for individual species. Otherwise as above
Loss of biodiversity	External & Internal	High likelihood with unknown consequences	Yes	Predominantly human	Limited – need far more research and monitoring to better identify causes. Assisted by appropriate legislation, management tools and enforcement

The potential for these threats to degrade the World Heritage values of CERRA is exacerbated by the property's mostly rugged terrain, fragmented nature and complex boundaries. These make on-ground management measures, such as fire management, pest animal and weed control, and the regulation of access, extremely difficult.

The measures being used to address these potential threats are listed in the Table above and also in Section 11.7

II.6 MONITORING

Current Monitoring program

There is currently no overall coordinated CERRA monitoring program, however there are a number of reserve specific projects being undertaken which provide baseline and trend data. These projects are undertaken to the limit of available resources, often guided by political priorities. Examples of these include:

- vegetation mapping;
- visitation indicators;
- species specific and flora/fauna communities projects;
- threatening processes particularly fire, weeds and pest species; and
- agencies own integrated 'state of the park' reporting.

Monitoring has been identified as a management objective in the *CERRA Strategic Overview*. In particular, the development of an integrated program between the managing agencies is envisaged. Indicators to be monitored are established in the Strategic Overview as:

- Review and update as necessary CERRA's World Heritage values and detail their occurrence in each reserve;
- Ensure that management plans contain provisions for evaluating and monitoring their effectiveness;
- Develop mechanism for regular reporting on the state of CERRA's World Heritage values through routine monitoring of core and supplementary indicators, following the baseline studies mentioned above;
- Develop monitoring procedures to measure success of rehabilitation programs; and
- Undertake and support research into patterns of visitor use of CERRA and its impacts on World Heritage and other values.

Results of current monitoring program and of Key Indicator measurement

Queensland

In the Queensland portion of CERRA, the Queensland Herbarium has produced vegetation maps to 1:100 000. There are also significant areas of CERRA including Springbrook, Lamington, Mt Barney and parts of Main Range that have had vegetation types mapped to 1:50 000.

Bush campsite monitoring across several of the National Parks within the CERRA property including Lamington and Main Range are undertaken on an ongoing basis. This monitoring has enabled park managers to establish key impacts and work towards establishment of sustainable limits to ensure values are protected.

The weed species, *Buddleia madagascariensis*, has recently been detected in Springbrook National Park and is of particular concern due to its ability to infest not only disturbed areas, but intact rainforest as well. Infestations have been mapped as part of the eradication program to facilitate monitoring any rate of spread and success of control measures. Natural Integrity statements are currently in development for reserves in the QPWS estate. These statements will provide baseline data for establishment of common monitoring programs and state of the park reporting.

New South Wales

NPWS is introducing a Visitor Data System (VDS), a database used to store and analyse visitor information. The data base was developed from a version supplied by Parks and Wildlife South Australia, and modified for NPWS use. Pilot sites were identified and during the year the VDS installed for testing in nine locations across the state.

The VDS receives data from digital counters that provide date, time and direction of travel. The VDS analyses these data to reveal total visitor numbers, daily use patterns and longer term trends. This information will be used to monitor visitor impacts and schedule maintenance and compliance activities. Digital counters are operational at two trail locations within CERRA (Mount Warning and Yuraygir national parks), and a further four installations will be competed in CERRA reserves during 2002-3 (Border Ranges, Bundjalung, Dorrigo and Washpool national parks).

The NSW State of the Parks reporting system is being developed by NPWS to improve the quality and quantity of information available to people about natural and cultural heritage values, the pressures on those values, and the role our parks system is playing in the conservation of those values.

Future reports will enable comparison over time of the conservation outcomes being achieved across NSW parks. For the public the reports will describe how well NPWS is meeting its management objectives, and NPWS will be able to use the reporting to guide and inform its management decisions.

A copy of this report can be accessed at: <u>http://www.npws.nsw.gov.au/about/state_of_parks/state_of_parks.html</u>

II.7 CONCLUSIONS AND RECOMMENDED ACTION

a. Main conclusions regarding the state of the World Heritage values of the property (see items II.2 and II.3 above)

The World Heritage values of the CERRA property are well maintained due particularly to legislative protection afforded protected areas and significant funding allocations from State and Commonwealth agencies to support active management actions including weed control, regeneration, rainforest rehabilitation, research and monitoring. Changes in tenure, particularly of adjacent properties, have enhanced the protection of the World Heritage areas and adjacent land.

The Strategic Overview for Management document facilitates enhanced protection of World Heritage Values through approaching the property as a whole and guiding management decisions at a strategic level. The key management objectives as detailed in the Strategic Overview are:

• To ensure that the World Heritage values of the property are clearly identified;

- To ensure that the World Heritage values of CERRA are protected through appropriate long-term legislative, regulatory and institutional arrangements;
- To ensure that the World Heritage values of CERRA are conserved through both pro-active management and the control of threatening processes;
- To ensure that degraded areas of CERRA are rehabilitated to a natural condition;
- To ensure that the World Heritage values of CERRA are presented in the most appropriate and sustainable way to the community; and
- Through achievement of the above objectives, to transmit the outstanding universal values of CERRA to future generations.

b. Main conclusions regarding the management and factors affecting the property (see items II.4 and II.5 above)

Given the sound legislative base for protection of the property; the most significant factors affecting management are the identification and monitoring of values and adequate management of key threatening processes.

In particular, the ongoing commitment to coordinated monitoring and research efforts across the property and development of systems for storage and distribution of resource data and research results is of importance.

This relates particularly to *loss of biodiversity*, identified as a high risk factor with the ability to ameliorate the risk limited by adequate knowledge of values and hence the ability to identify existing and potential causal processes. The importance of this risk factor is heightened due to the inability to fully predict the consequences of realisation of the threat.

Appropriate management tools and enforcement capability are common factors in the ability to manage the other key threats to the property which are *uncontrolled or inappropriate use of fire*; *inappropriate recreation and tourism activities*, including the development of tourism infrastructure; and *invasion by pest species* including weeds, feral animals and fungal pathogens.

c. Proposed future action/actions

- a. Implement the Strategic Overview including ongoing support for and involvement of, the Community Advisory Committee and Technical & Scientific Advisory Committee.
- b. Develop a strategic approach to monitoring, both as a whole of property approach and in line with respective state agency management objectives.
- c. Consultation and involvement of indigenous people, appropriate consideration of issues and subsequent enhanced ability to protect cultural values

d. Responsible implementing agency/agencies

Environment Australia Queensland Parks and Wildlife Service New South Wales National Parks and Wildlife Service

e. Timeframe for implementation

The CERRA Strategic Overview for Management document is current until 2007 when it is due for joint review. Commitment from state agencies to manage the protected estate that makes up the CERRA World Heritage property is ongoing.

f. Needs for international assistance

Australia has not requested assistance from the World Heritage Fund.

g. Experience relevant to other States Parties

- Economic benefits associated with eco-tourism with particular regard to international tourism;
- Interpretation / educational benefits of existing interpretive projects enhanced through inclusion and recognition of World Heritage values;
- Increased recognition with local government agencies;