# PLAN OF MANAGEMENT

**NSW National Parks and Wildlife Service** 

June 2002

This plan of management wa 26 <sup>th</sup> June 2002.	as adopted by the Minister for the Environment of	on

# **Acknowledgments**

The contribution made by John Williams of the University of New England, Armidale, and members of the community who participated in consultation workshops and contributed submissions on the exhibited draft plan of management, is greatly appreciated.

Permission by the NPA to use extracts from "The NPA Guide to National Parks of Northern New South Wales" is acknowledged and appreciated.

Staff from the North Coast Region office at Dorrigo and the Northern Directorate Planning Group prepared this plan of management.

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ISBN No: 0 7313 6352 3

#### **FOREWORD**

Cathedral Rock National Park is located on the New England Tablelands in northeast NSW, 70 kilometres east of Armidale.

The Park comprises spectacular granite outcrops and a diversity of vegetation including forests, woodland heaths and swamps. The Park has high conservation values, in particular the highland swamps and species that are rare, vulnerable and endemic to the area. The Park contains the southern most distribution of New England Mallee. There is also a biogeographical connection with sub alpine and high montane vegetation communities.

Regionally the Park provides an important corridor between the Gibraltar Range and Guy Fawkes River National Parks in the north, and the Serpentine Nature Reserve, New England, Cunnawarra and Oxley Wild Rivers National Parks in the south.

The spectacular geological features are the main visitor attractions with walking tracks leading from the camping and day use areas to Woolpack Rocks and Cathedral Rock. The Park provides a range of nature based recreational opportunities including camping, picnicking, bushwalking, bird watching, rock climbing, photography and nature appreciation. Two pleasant camping and day use areas, and an extensive walking track network, are provided in the Park.

This plan of management aims to ensure that the natural and cultural values of the Park are maintained, whilst providing the current level of visitor facilities and recreational experiences. The integrity of native flora and fauna will be assisted through cooperative pest species and fire management with neighbouring landholders.

This plan of management establishes the scheme of operations for Cathedral Rock National Park. In accordance with the provisions of Section 75 of the *National Parks and Wildlife Act 1974*, this plan is hereby adopted.

BOB DEBUS
MINISTER FOR THE ENVIRONMENT

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#### 1. INTRODUCTION

The *National Parks and Wildlife Act 1974* requires that a plan of management be prepared for each national park. A plan of management is to contain a written scheme of operations proposed to be undertaken within the national park, and must be consistent with the purpose and objectives of the Act.

Prior to finalisation of a plan, a draft plan of management is prepared and is placed on public exhibition for at least one month. During the period of public exhibition, any person may make a written submission about the plan.

After public exhibition of a draft plan of management, the plan and all submissions made in response to the exhibition are referred to the National Parks and Wildlife Advisory Council for consideration and advice. The plan is then submitted, together with comments from the Advisory Council, to the Minister for the Environment.

The Minister may adopt the plan of management with or without alteration, or may refer it back to the Director-General and Advisory Council for further consideration.

A draft plan for Cathedral Rock National Park was placed on public exhibition for a period of three months from 30<sup>th</sup> March until 2<sup>nd</sup> July 2001. The exhibition of the plan attracted 10 submissions which raised 8 issues. All submissions received were carefully considered before adoption of this plan.

A plan of management is a legal document that provides for the protection and use of a national park. Once a plan has been adopted by the Minister, no operations may be carried out in the national park unless they are in accordance with the plan.

This plan of management is based on available scientific and management information and is prepared in accordance with the NSW National Parks and Wildlife service (NPWS) management policies and priorities. To obtain further information or historical references on this plan of management and on Cathedral Rock National Park, contact the Dorrigo Plateau Area Office at the Rainforest Centre, Dorrigo (telephone 02 6657 2309).

#### 2. PARK DESCRIPTION AND VALUES

## 2.1 Location and Regional Setting

Cathedral Rock National Park (referred to as the "Park" in this plan) is located approximately 70 kilometres east of Armidale on the New England Tablelands in northeastern NSW. The Park is one of the few remaining tracts of naturally vegetated land on the Tablelands. The Park provides a valuable link, or corridor, between the Gibraltar Range National Park and Guy Fawkes River National Park and Nature Reserve in the north and the Serpentine Nature Reserve, New England, Cunnawarra and Oxley Wild Rivers National Park in the south (refer to figure 1).

The Park was gazetted in October 1978, with the latest additions being gazetted in January 1999. It now has an area of 8,839 hectares (refer to figure 2). Additions to the park have included the former Round Mountain State Forest (No 336) and former parts of Yooroonah State Forest (No 1040).

The Park adjoins Guy Fawkes River and Serpentine Nature Reserves, while surrounding private property is primarily used for cattle grazing.

#### 2.2 Climate

The climate of the Park is mild to warm in summer, and cool to cold in winter, with regular frosts and occasional snow. The mean annual rainfall for nearby Ebor is 958 mm, with most rainfall occurring during summer.

#### 2.3 Landform

The topography of the Park is generally undulating with some rugged granite outcrop areas. The altitude of the Park varies from 1,100m to 1,584 above sea level at the summit of Round Mountain, a domed peak in the centre of the Park. The summit of Round Mountain is the highest point on the New England Tablelands.

There are three main landforms:

- the basalt outcrop of Round Mountain and a few other peaks in the western section of the Park:
- granite boulder outcrops, most notably Cathedral Rock, a series of large granite boulders perched one on top of another to a height of about 200 metres and extending approximately one kilometre, and,
- highland swamps.

## 2.4 Hydrology

The Park is located on the divide of the Clarence and Macleay catchments, streams to the north-east flow into the Clarence, and streams in the south-west flow into the Macleay. The headwaters of the Snowy Creek, which are within the Park, contribute to the Oaky River hydroelectric scheme.



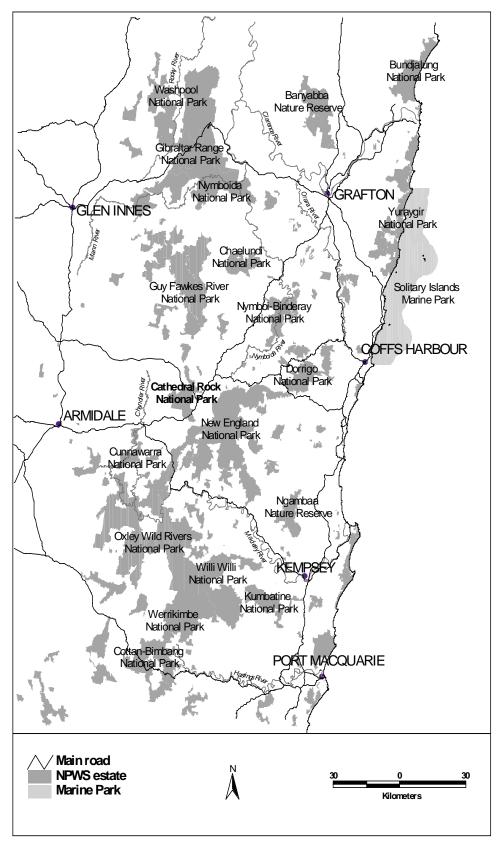
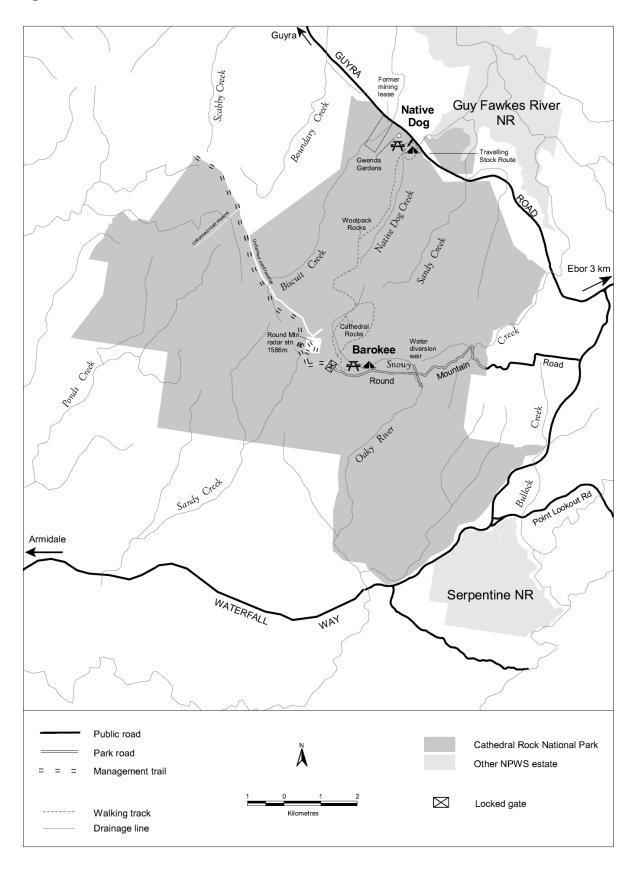


Figure 2: Cathedral Rock National Park



# 2.5 Geology and Soils

The granites of the New England batholith, which formed deep beneath the earth's surface 270 million years ago, dominate the Park. For the next 50 million years further intrusions of molten rock was forced into fissures deep within the earth's crust, forming some of the dykes evident in the Park today. The most recent geological feature in the Park is the basalt capping on the summit of Round Mountain.

The soils that form on the granite are acid podsols and yellow earths with coarse sand A horizon and are quite infertile. Peaty soils occur in the swamps, while the basalt capping has produced quite fertile soil on Round Mountain.

#### 2.6 Native Flora

Although the Park is predominantly covered in bare granite or poor soils derived from granite, its vegetation shows great diversity. The rugged topography has created a range of habitats including rocky tors, mid-slopes with deep sandy soil, and low-lying swamps with deep peaty soil. Because of the high altitude, many of the plants growing here are alpine and sub-alpine species more commonly found in the Snowy Mountains and Tasmania.

The complex hydrology in the Park has also given rise to considerable diversity in vegetation communities. The main vegetation communities in the Park, as described by Wright (1991) include:

# Eucalypt forest

Most of the Park is covered in a mixed forest of narrow-leaved peppermint (*Eucalyptus radiata*), wattle-leaved peppermint (*E. acaciiformis*) and mountain gum (*E. dalrympleana*). New England peppermint (*E. nova-anglica*) dominates the swampy valleys, while Youman's stringybark (*E. youmanii*) and mountain gum are common on the rocky slopes where the soil is shallow. Occasional brown barrel (*E. fastigata*) and snow gum (*E. pauciflora*) trees are scattered throughout the area.

The understorey varies from open to quite densely vegetated, but always contains shrubs with small hard leaves. Pea flowers (*Dillwynia spp.*) and mountain holly thrive here, as do the heath plants which have many small leaves growing close to the stem. Larger shrubs like conesticks, the geebungs and crinkle bush grow alongside tantoon tea tree, lemon bottlebrush, grass tree, prickly Moses (*Acacia ulicifolia*) and a number of other spiky wattles. The taller forests may also have a small tree layer of silver wattle, broad-leaf hickory, fern-leaf wattle, black she-oak (*Allocasuarina littoralis*) and coast banksia (*Banksia integrifolia*).

Apart from patches of snow grass, the ground is generally covered with fibrous plants like the mat rush, flax lily and the native iris that produces clusters of three-petalled purple flowers.

Small isolated stands of tall open forest dominated by manna gum (*E. viminalis*) messmate (*E. obliqua*) and New England blackbutt (*E. andrewsii*) grow in places where the soil has been enriched. These more fertile soils develop in the lower valleys where sediment has collected, and around the summit of Round Mountain where basalt is the underlying rock. Snow grass grows in the understorey.

#### Gully rainforest

Small areas of rainforest have developed in the wetter gullies that are well sheltered from the wind. Although similar to the cool temperate rainforest of New England National Park, this forest is dominated by mountain blueberry (*Elaeocarpus holopetalus*) rather than Antarctic beech (*Nothofagus moorei*). Only a very small area

of Antarctic beech has been found in the Park, protected from fire by the granite tors. Hanging moss drapes many of the trees, and lichens, mosses and liverworts thrive in the moist conditions on tree trunks and boulders.

The forest is quite tall, occasionally reaching a height of 20 metres. Possum wood (*Quintinia sieberi*), blackwood (*A. melanoxylon*) and tree heath also grow in the main tree layer. The feathery green fronds of the soft tree fern fill the understorey, and vines like silkpod and austral sarsaparilla wind their way through the forest. A myriad of delicate ferns, such as common filmy fern, kangaroo fern, felt fern and water fern, cover the wet rocks and forest floor.

# **Swamps**

The Park lacks fast-flowing streams, as the valleys are broad and swampy. Drainage water seeps from one swamp to the next, creating a complex group of plant communities. Many of the fen and fen-heath plants are subalpine species at the northern limit of their range. Herbs like cord-rush, Alpine fan flower, yellow-eyes, tufted lily and various sedges and rushes dominate the fen community. Donkey orchids and slender leek orchids grow amongst these blady species.

Fen-heath has an overstorey of low shrubs like the myrtle tea tree, alpine Epacris, heath myrtle, alpine bottlebrush and lemon bottlebrush. The very pretty purple-flowered coast mint bush also grows in this community. Between the fen and fen-heath are small areas of sphagnum bog; thick hummocks of yellow moss which can absorb huge quantities of water. As the water slowly trickles out during the dry part of the year, these bogs are immensely important to the survival of the plants downstream from them.

# Tors and granite outcrop communities

A few plants have managed to survive in the spaces between the granite boulders. These small and scattered habitats are sheltered from the cold winds of the plateau and shaded from the glaring sunlight. Large shrubs like mountain tea tree (*Leptospermum spp*) and she-oak (*Allocasuarina rigida*) grow in the thin layer of soil that collects between the boulders. Smaller crevices in the rock support a variety of sedges, native iris, tufts of the mauve-flowered rock Isotome, and the large flax lily, a species found in the sub-alpine areas of Victoria and Tasmania.

#### Mallee heath

In the western part of the park, high amongst the granite tors of the Macleay River catchment divide, is an unusual mallee plant community. New England mallee is a low eucalypt that grows as a cluster of slender trunks. Known from only a few locations on the New England Tableland, this species rarely grows on sandy granite-derived soils. At this location, it dominates a low heath.

In the Park and surrounding area there are 12 rare or threatened Australian plants (ROTAP) species (Briggs and Leigh, 1996), of which four are listed as vulnerable, six are rare, and two are poorly known. One species, *Callitris oblonga*, is listed as vulnerable in the *Threatened Species Conservation Act*. There are also 15 other significant species, of these 11 are at their distributional limit in the Park, two are rare in NSW, and two are regionally significant (refer to Appendix 1).

The Park is the centre of endemism for vascular plants of the tablelands Eucalypt complex and New England batholith outcrops. It is also a centre of endemism for vertebrate animals occurring in the dry sclerophyll-low nutrient ecosystems.

#### 2.7 Native Fauna

A range of mammals has been recorded in the Park. They include the New Holland mouse, common and little bent-winged bat, tiger quoll, brush-tailed phascogale, greater glider, ringtail possum, eastern grey kangaroo, wallaroo, red-necked and swamp wallaby. The brush-tailed rock wallaby and parma wallaby are also thought to live in the area. Small ground mammals such as marsupial mice, native bush rats and native swamp rats are also found in the Park. The koala (*Phascolarctos cinereus*) is listed as vulnerable under the *Threatened Species Conservation Act (TSC Act)*.

The bird life is varied. The glossy black cockatoo (Calyptorhynchus lathami), turquoise parrot (Neophema pulchella) and powerful owl (Ninox strenua) are listed as vulnerable under the TSC Act. The superb lyrebird inhabits the moist gullies and forests. The wedge-tailed eagle is commonly seen overhead while large numbers of thornbills, finches and wagtails occupy the heath and shrubby understorey of the forests.

# 2.8 Indigenous Cultural Heritage

The Park lies within the territory of the Gumbaynggir Aboriginal people and the Northern Tablelands Aboriginal Land Council.

Only one site has been recorded, however, no comprehensive survey of the Aboriginal cultural heritage of the Park has been undertaken.

# 2.9 Non Indigenous Cultural Heritage

Early European activity in the area was associated with grazing and mining for gold and sapphires. Sites associated with past use include a former rural holding called Gwenda Gardens (which now includes an orchard and garden, and footings of outbuildings and a house); the Snowy Creek sapphire fossicking trenches; Round Mountain aqueduct; mining lease dams; and Guyra Road gravel pit.

During World War II tank barriers were built at strategic locations on route between the coast and the Tablelands in anticipation of a Japanese invasion. There is a well-preserved tank barrier near the southern boundary of the Park that was built by the Ebor Volunteer Defence Corporation. This tank barrier was built as a second line of defence and consisted of eight, one and a half metre high concrete pyramidal structures at the edge of the swamp and three rows of wooden posts leading to the old Armidale-Ebor Road. A tunnel was constructed under a section of the Armidale-Ebor Road, to allow it to be destroyed by explosives.

The Ebor tank barrier has been assessed as being high historic significance (McDonald, 1996).

#### 2.10 Recreation and Tourism

The Park provides a range of recreation opportunities including camping, picnicking, bushwalking, photography and nature appreciation.

The Park can be accessed from both the Armidale - Grafton Road (or Waterfall Way) to Barokee camping and day use area and the Ebor - Guyra Road to the Native Dog Creek camping and day use area. There are basic camping and picnicking facilities at both camping and day use areas (refer to Figure 2).

Barokee camping and day use area has about 3 picnic sites and 11 secluded campsites set amid banksias and eucalypts. Water is available from a small stream that runs through wet heath.

Native Dog camping and day use area has 10 campsites (some suitable for caravans) but it is not as heavily used as Barokee. Water is available from a nearby creek.

Extensive networks of walking tracks lead to the major features of the Park and links the two recreation nodes.

#### 3. MANAGEMENT OBLIGATIONS AND OBJECTIVES

#### 3.1 National Parks in New South Wales

The national park concept was introduced into Australia through the establishment of Royal National Park in 1879.

For the purpose of preparing plans of management the NPWS has adopted the International Union for the Conservation of Nature and Natural Resources (IUCN) 1994 definition of a national park:

"A natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible." (IUCN, 1994)

National parks are part of the regional pattern of land use. The management of a national park aims at minimising disturbance to natural and cultural heritage. Other land uses for example, agriculture, forestry and mining, are distinguished by an acceptance or encouragement of environmental modification. National parks, therefore, provide for only a limited part of the land use in any region.

# 3.2 Legislative and Policy Framework

The NSW National Parks and Wildlife Service (NPWS) is the agency of the New South Wales Government with primary responsibility for the conservation of natural and cultural heritage within the State. The management of national parks in NSW is in the context of the legislative and policy framework. The legislation of primary concern with the management of Cathedral Rock National Park is the *National Parks and Wildlife Act 1974 and* the *Threatened Species Conservation Act 1995*.

The National Parks and Wildlife Act 1974 is the main legislation that defines the powers, duties and functions of the NPWS relating to all areas reserved as national parks, historic sites, nature reserves, Aboriginal areas, state recreation areas and regional parks. The Act outlines the responsibilities of the NPWS concerning nature conservation, cultural heritage management, and appropriate uses of protected areas.

In addition an assessment under Part 5 of the *Environmental Planning and Assessment Act 1979* is also required prior to carrying out of any works within the national park.

The *Threatened Species Conservation Act 1995* concerns threatened species, communities, and critical habitat in NSW. The NPWS has an obligation to ensure threatening processes are controlled, managed or prohibited.

There are *field management policies* relating to nature conservation, Aboriginal and historic sites' conservation, recreation, research and communication. The field management policies are evolving in response to changes in the economic, social and political environment in NSW.

The Northern Wilderness Assessment Report (NPWS, 2001) has identified wilderness areas over Cathedral Rock National Park and proposed two options for wilderness declaration under the *Wilderness Act 1987*. Final decisions on the declaration of wilderness have not yet been made. If declaration of wilderness proceeds over any part of the park, wilderness areas will be managed according to the following wilderness management principles:

- To restore (if applicable) and to protect the unmodified state of the area and its plant and animal comminutes;
- To preserve the capacity of the area to evolve in the absence of significant human interference; and
- To permit opportunities for solitude and appropriate self-reliant recreation.

# 3.3 General Objectives of National Park Management

As outlined in the National Parks and Wildlife Act, management of Cathedral Rock National Park will be in accordance with the following objectives:

- the protection and preservation of their scenic and natural features;
- the conservation of wildlife;
- the maintenance of Aboriginal sites and historic features;
- the provision of appropriate recreation opportunities; and
- the encouragement of scientific and educational inquiry into environmental features and processes, prehistoric and historic features, and park use patterns.

# 3.4 Specific Objectives for Management of Cathedral Rock National Park

In addition to the above general objectives, the management of Cathedral Rock National Park will be subject to the specific management objectives outlined in each section of Part 4 of this plan.

#### 4. MANAGEMENT STRATEGIES

This section contains the actions for the management of Cathedral Rock National Park, supported by relevant background information, and these are addressed under the following section headings:

- 4.1 Natural Resources
- 4.2 Cultural Resources
- 4.3 Use of the park
- 4.4 Management Operations

The actions and guidelines outlined in this Plan will provide the framework for management of the Park. These are based on consideration of matters raised through the community consultation process, NPWS legislative responsibilities, and anticipated availability of resources for management of the Park.

Management actions in this Plan have been developed to pursue the stated objectives for management of the Park. Unless otherwise specifically stated in this Plan will be in accordance with the provisions of the *National Parks and Wildlife Act* and NPWS policies.

#### 4.1 Natural Resources

#### 4.1.1 Water

A low dam wall was constructed across Barokee Swamp for the New England County Council in 1961 to divert the headwaters of Snowy Creek into the Oaky River Catchment. This augmented the water available to the Oaky River Hydroelectric Scheme. The water diversion is operated by a sluice gate which is closed during relatively wet times, allowing water to accumulate behind the dam wall. The dam wall has altered the permanence and height of the water table above and below the wall. Above the dam wall soils are permanently waterlogged and free water is present, while below the wall such conditions are intermittent (Tremont, 1991).

Country Energy, the local electricity supply company, were issued with a licence for the Snowy Creek Diversion by the Department of Land and Water Conservation under section 12 of the *Water Act*. The existing licence is regarded as an existing use under section 39 of the *National Parks and Wildlife Act*. The terms, conditions, and use of the land under lease are not affected by the subsequent gazettal of the Park. The diversion of the Snowy Creek should be licensed under the *National Parks and Wildlife Act*.

# **Objectives**

- To maintain the water quality and health of rivers and streams in the Park.
- To ensure the Snowy Creek diversion does not significantly adversely affect the ecological integrity of the wetland system in the Park.

## Strategies and Actions

- Investigate the feasibility of restoring the natural hydrology in the Park.
- Negotiate a licence for the Snowy Creek Diversion if the diversion is to continue operating.

# 4.1.2 Landform, Soil and Geology

The soils of the Park are susceptible to erosion and siltation, necessitating special care with respect to the design, drainage and maintenance of roads and tracks.

# Objective

To minimise accelerated (human induced) soil erosion in the Park.

# Strategies and Actions

- Identify areas of accelerated soil erosion and implement measures to rehabilitate affected areas.
- Undertake further rehabilitation of the old mining site at Biscuit Creek.

#### 4.1.3 Native Flora

Vegetation studies of the Park were undertaken in 1970, 1988 and 1994 by Williams and in 1995 by Metcalfe. Past grazing, fire, encroachment of introduced plants, feral pigs and hydrological changes have altered the structure and composition of much of the highland vegetation including the swamp communities (Tremont, 1991).

#### Objectives

- To conserve the integrity and diversity of native vegetation communities in the Park.
- To reduce or eliminate the threats to significant vegetation communities, particularly the sensitive dry rainforest, swamp, New England mallee and alpine communities.

# Strategies and Actions

- Encourage studies on rare and endemic species in the Park.
- As far as practical, curtail threatening processes from having further impact upon sensitive vegetation communities, such as eliminating wildfire in swamp and alpine/subalpine plant communities and pig control programs (refer to sections 4.1.5 and 4.1.6).
- Fuel reduction practices around the Airservices Australia facility on the summit of Round Mountain (refer to section 4.4.4) need to be cognisant of the adverse effects fire is having on the sensitive alpine/subalpine plant communities (refer to section 4.1.5).

#### 4.1.4 Native Fauna

There has been no comprehensive fauna survey undertaken within the Park. However, the Park was surveyed as part of the Comprehensive Regional Assessment for upper north east of NSW in 1997. Nine amphibian, 19 reptile, 103 bird and 20 mammal species have been recorded in the Wildlife database for the Park and its immediate environs.

The *Threatened Species Conservation Act* requires that a recovery plan must be prepared for all species listed as endangered or vulnerable. The purpose of a recovery plan is to promote the recovery of the endangered or vulnerable species to a position of viability in nature. The koala, glossy black cockatoo, turquoise parrot and masked owl, all of which occur in the Park, are listed as vulnerable under the *Threatened Species Conservation Act*.

The main threats to the glossy-black cockatoo arise from the loss of nesting and feeding resources. The species nests in hollows in very large eucalypts, either live or dead, in open forest. It feeds almost exclusively on the seeds of mature forest oaks, *Allocasuarina torulosa* and *A. littoralis* (Clout 1989 cited in Gilmore and Parnaby, 1994). Allocasuarinas regenerate well from seed after fire, but it may take 20 years

before the trees produce suitable food resources for the glossy-black cockatoo (SFNSW 1995). Loss of mature cone-producing forest oaks through frequent and/or broad scale burning therefore represents a threat to the glossy-black cockatoo.

The turquoise parrot is a habitat specialist on the edge of Eucalypt woodland with a grassy understorey adjacent to clearings and on forested ridges and creeks. The preferred breeding habitat is open woodland where there is an abundance of seeding grasses, suitable nesting sites and permanent water. Feral animals may pose a threat to the species.

Koalas feed predominantly on a few Eucalypt species in northern NSW such as Sydney blue gum (*Eucalyptus saligna*), tallowwood (*E. Microcorys*), blackbutt (*E. pilularis*), and small-fruited grey gum (*E. punctata*). The distribution of koalas is closely linked to tree species growing on high nutrient soils (Gilmore and Parnaby, 1994).

The masked owl requires dry sclerophyll forest for roosting and nesting and woodland for hunting. It feeds on a range of small to medium sized arboreal and terrestrial mammals. Impacts on the habitat of its prey through frequent burning, and predation by feral animals, pose a threat to the species (refer to section 4.1.6).

When prepared, recovery plans for endangered fauna within the Park will be implemented in the Park.

# Objectives

- To conserve and protect the diversity of native animals and their habitats in the Park.
- To reduce or eliminate threats (such as from feral animals and frequent fire regimes) to endangered species and their habitats in the Park.

# Strategies and Actions

 Monitor, and where appropriate record, the distribution and abundance of threatened species in the Park.

## 4.1.5 Fire Management

Fire is an important natural phenomenon recognised as one of a number of factors determining the composition of vegetation and faunal communities in Australia. Many species of Australian flora and fauna have mechanisms to survive fire, and some require fire for reproduction or stimulation of new growth. A number of vegetation communities, however, are particularly sensitive to fire.

Fire frequency, intensity and season of occurrence are major factors influencing the distribution and composition of plant and animal communities. A variety of fire regimes is needed in order to conserve biodiversity.

The period of highest fire danger in the Park is spring and early summer (especially if summer rainfall is lower or later than would typically occur) (NPWS, 1997).

Vehicle access to most of the Park perimeter, and the Round Mountain Road provides access to the centre of the Park, provides a good staging point for fire management.

The NPWS has a legislative responsibility to protect life and property on the NPWS estate and to prevent fire from entering or leaving the NPWS estate. Under the *Rural Fires Act 1997*, the NPWS is a recognised Fire Fighting Authority that is required to implement the provisions of bush fire management plans.

Fire management within the Park will be in accordance with the NPWS responsibilities under the *Rural Fires Act* and the regional bushfire risk management plan and operational fire management plans. A draft fire management plan has been prepared for the Park, and the finalisation of this plan will be a high priority. The fire management programs undertaken in the Park will be in accordance with this plan.

Dams were built, probably in the 1960s–70s, in the vicinity of Gwenda Gardens by miners for water supply. These dams are now considered to be of value as a water supply for fire fighting.

Priority for fire management in the Park will be given to activities that are:

- essential for protection of life, property, Aboriginal and historic sites;
- conservation of specific vegetation communities/habitats and plant and animal species that require specific fire regimes, and
- protection of Park and Airservices Australia infrastructure (refer to section 4.4.4).

The NPWS regards cooperative fire management as essential for both the protection of life and surrounding property, and of the natural and cultural heritage of the Park. An important aspect of fire management for the NPWS is participation as a member of local Bush Fire Management Committees and the preparation of bushfire management plans. Dorrigo Plateau Area is a member of the Dumaresq and Guyra Bush Fire Management Committees.

#### Objectives

- To protect human life and property.
- To maintain and enhance biodiversity within the Park.
- To protect important habitat required by threatened fauna.
- To minimise, or where necessary exclude, fire from fire sensitive communities.
- To retain the dams for the benefit for fire management and protection.

## Strategies and Actions

- Wildfire will be suppressed in a manner that minimises threats to human life and property, and adverse impacts on the natural and cultural features of the Park.
- Finalise the draft fire management plan for the Park by 2004, ensuring that the special needs of fire sensitive vegetation communities are fully addressed in the plan.
- In the fire management plan, ensure the habitat needs for endangered species are protected (eg by protecting mature *Allocasuarina* trees from fire for the glossyblack cockatoo).
- Negotiate an agreement with Airservices Australia (refer to section 4.4.4) with regard to the asset protection zone surrounding their facility on Round Mountain, so as to ensure that any fire management practices undertaken are cognisant of the special needs of the fire sensitive alpine/subalpine plant community of the site. Slashing will be investigated as the preferred alternative to burning of the fire radiation zone.
- Pending the adoption of the fire management plan, no prescribed burning will be undertaken, except where essential to provide protection to the Airservices Australia facility on Round Mountain (refer to above action).
- The old mining dams will be retained for fire fighting purposes.
- Maintain liaison with Dumaresq and Guyra Rural Fire Brigades, Fire Control Officers, fire management committees and neighbouring landholders.

# 4.1.6 Pest Plant and Animal Species

Pest plants and animals have an impact on the natural environment through competition for resources, predation, disturbance to the natural environment, and transmission of disease. Pest species may also have an economic impact on neighbouring properties. Activities such as road building, grazing, logging, and fire have provided opportunities for the establishment of pest species.

Priority for control of pest species will be given to aggressive competitors that: are known to displace native species; are damaging cultural heritage sites; are affecting or threatening to invade neighbouring lands; may be a threat because of disease; are new isolated occurrences; or have the potential to spread.

Where appropriate, the NPWS may enter into cooperative management with Park neighbours to control pest species on or adjacent to the Park boundary to enable more effective pest species control across the landscape.

The Noxious Weeds Act 1993 requires the NPWS to control noxious weeds in the NPWS estate to the extent necessary to prevent such weeds spreading to adjoining lands. Noxious weeds known to occur in the Park include blackberry (Rubus fruticosus) which is primarily found along watercourses and roads and in disturbed areas of the Park. This is an aggressive plant that can reproduce by seed, root parts, cuttings, and by root formation on any part that contacts soil (Lamp and Collet, 1989). Selection of a control technique for this species within the Park will have regard to minimising the impact on water quality in the creeks.

Gwenda Gardens, associated with the Boyd Hickey homestead, occurs within the Park. It has an orchard and other plantings of exotic species. The site will be assessed for its historic significance (refer to 4.2.2), but if not subsequently considered to be significant, the exotic plants will be destroyed where there is the potential for garden escapes to colonise the surrounding native vegetation.

Feral predators known to occur within the Park include foxes, brown hares, rabbits, feral dogs, feral cats and feral pigs. The abundance of feral animals and their impact on native flora and fauna in the park is unknown.

Fox predation on native fauna has been listed as a key threatening process in the *Threatened Species Conservation Act*. The NPWS has prepared a threat abatement plan for foxes. The threat abatement plan identifies key fox sensitive threatened species and provides broad recommendations regarding fox management.

The Rural Lands Protection Act 1998 (RLP Act) requires pest animals declared under the Act to be controlled. Wild dogs, including dingoes, have been declared throughout NSW and hence, the NPWS has a statutory obligation to control wild dogs on its estate.

Under the RLP Act, public lands considered to contain high quality dingo habitat have been listed as dingo management areas. This includes Cathedral Rock National Park. The RLP Act requires public land managers, such as the NPWS, to assist in the preparation of a wild dog management plan for dingo management areas. These plans are to identify methods for the control of wild dogs and the conservation of dingoes in these areas and are to be approved by the local Rural Land Protection Board.

Feral pigs are very destructive, especially in the wetlands of the Park (Alexiou 1983 cited in Tremont 1991) contributing to the destruction and loss of plant communities, and increased runoff and soil erosion. Pigs also affect native fauna by competing for

food and habitat and direct predation. Pig control measures such as shooting, baiting and trapping have been undertaken in the Park since 1978. Hunting for pigs with dogs is not permitted in the Park under the NPWS's Field Management Policies.

## Objectives

• To control, and where possible eradicate, introduced species in the Park so as to minimise their detrimental environmental impact.

# **Strategies and Actions**

- Prepare a pest species management plan for the Park.
- Retain exotic species at Gwenda Gardens only if determined to be of historic significance until they senesce. Exotic plants will not be replaced or allowed to regenerate or become invasive.
- Undertake fox and feral pig control programs in the Park consistent with the recommendations of threat abatement and pest species management plans.
- The current feral pig control programs will be maintained in the Park.
- Assess the impacts of wild dogs in the park and on neighbouring land. If the impact from predation is significant, undertake a cooperative wild dog control program with neighbours along the Park boundaries in accordance with NPWS policy.
- Assist in the preparation and implementation of a wild dog management plan to be approved by the local Rural Lands Protection Board.

#### 4.2 Cultural Resources

Cultural heritage includes both indigenous (Aboriginal) and non-indigenous history. It comprises important components of the environment that may have aesthetic, historic, scientific and social significance to present and future generations. Preservation of cultural heritage will be an important aspect of management of the Park.

# 4.2.1 Aboriginal Cultural Heritage

The NPWS has a legal responsibility for management of Aboriginal sites under the *National Parks and Wildlife Act* but acknowledges the right of local Aboriginal people to be part of decisions about their own heritage. The park falls within the Dorrigo Local Aboriginal Advisory Committee and the Gumbaynggir community. The NPWS is committed to consultation with the Aboriginal community regarding management of Aboriginal sites and Aboriginal cultural heritage issues. No cultural heritage study has yet been undertaken of the Park, probably accounting for only one Aboriginal site having been recorded in the Park.

#### Objectives

- To enhance knowledge of the Aboriginal heritage values of the Park.
- Aboriginal cultural values associated with the area are recognised, protected and presented appropriately in partnership with the local Aboriginal people.

## Strategies and Actions

- Encourage research into the Aboriginal cultural heritage of the Park in cooperation with the Gumbaynggir community.
- The Dorrigo LALC, Gumaynggir community, local Aboriginal elders and other representatives will be consulted about park management issues affecting Aboriginal cultural heritage.

- NPWS will consult with the Aboriginal community about any sites that that need to be added to the Aboriginal Sites Register and any actions necessary to protect sites.
- All Aboriginal sites, relics, historic places and culturally significant features will be protected from damage by human activity and fire. Management strategies will be prepared in consultation with representatives of the Aboriginal community.
- NPWS will undertake cultural heritage assessments for any new works and developments in partnership with representatives of the Aboriginal community.
- NPWS will work with the Aboriginal community to interpret the Aboriginal cultural values of the park.

# 4.2.2 Non-indigenous Cultural Heritage

#### Ebor Tank Barrier

A preliminary archaeological investigation of the World War II tank barrier was prepared by Appleton for Dumaresq Shire Council in 1996. It was concluded that the Dumaresq Shire Council, in conjunction with the NPWS, should produce a plan to develop part of the Ebor Tank Barrier for public display. This included walking tracks and a kiosk with display panels and historical interpretation of the site. The Dumaresq Shire Council has produced a conservation plan for the tank barrier site (McDonald 1996). However, promotion of the site would require upgrading the existing access and egress to the Waterfall Way in what is a very difficult and potentially dangerous site for the provision of a car park and turning circle. Public access will, therefore, not be encouraged to the site and no facilities will be provided.

While the concrete tank barrier requires no management, the timber tank barrier is deteriorating and is vulnerable to wildfire. The timber tank barrier will require protection if it is not to be lost.

## Gwenda Gardens and Boyd Hickey house site

Gwenda Gardens is located in the Park 13 kilometres west of Ebor, on the Guyra Road. The property was acquired by the NPWS in 1975, including house, property, internal fencing and yards.

Gwenda Gardens were associated with the Boyd Hickey homestead. It has an orchard and other plantings of exotic species. Preliminary assessment of the site identified the relevance of the planting and orchard to the history of the Park. There may be potential for garden escapes to colonise the surrounding native vegetation. The orchard and other plants at Gwenda Gardens need to be assessed for their historic significance, but it is unlikely the site will be deemed significant (refer to section 4.1.6).

The house was built in Ebor in the 1920s, and purchased by Boyd Hickey and moved to its present location around 1949. The house was assessed for heritage significance and it was concluded that it had little historical, architectural, or recreational significance. The house had been displaced from its historical context and served no useful purpose (NPWS, 1990) and was subsequently sold and removed leaving only the footings (Hoskin, 1983).

## Potential Historic Places

There are potential historic places that have been recorded for the Park including the Snowy Creek sapphire fossicking trenches, Round Mountain aqueduct and possibly the mining lease dams.

## Objectives

- To enhance knowledge of the historic values of the Park.
- To conserve and protect historic sites in the Park in accordance with the provisions of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).
- To ensure the integrity of the Tank Barrier site is preserved.

- Undertake a cultural heritage study of the Gwenda Gardens.
- Retain fencing around the house garden at Gwenda Gardens.
- As far as practical, protect the timber tank barrier from fire.
- Public vehicular access and interpretative display material will not be provided at the Ebor Tank Barrier site. The historic place may, however, be interpreted at another site in the Park.

#### 4.3 Use of the Park

Cathedral Rock is one of the highest points on the New England Tableland and is characterised by granite tors, sub alpine heaths, wildflowers and eucalypt woodlands. It provides opportunities for picnicking, camping, nature study and bushwalking.

There are an estimated 25,000 visitors to the park annually. Peak visitor usage coincides with the school holiday periods. It is anticipated that the level of use of the Park will progressively increase in the future.

Access to the Park is of an all weather 2-wheel drive standard. The Park can be accessed from both the Armidale-Grafton Road (or Waterfall Way) to Barokee camping and day use area and the Ebor-Guyra Road to the Native Dog Creek camping and day use area (refer to Figure 1).

Cycling will be permitted on park roads and management trails but is prohibited on walking tracks or off road or tracks. Horse riding is not permitted in the park because of the potential impact on the highly erodable granitic soils and the close growing habit of the extensive shrublands of the Park. Alternative opportunities for horse riding are available nearby on the Bicentennial National Trail which offers extensive riding in timbered country.

The Northern Wilderness Assessment Report (NPWS, 2001) has identified wilderness areas over Cathedral Rock National Park and proposed two options for wilderness declaration under the *Wilderness Act 1987*. Final decisions on the declaration of wilderness have not yet been made. If wilderness declaration proceeds, no new visitor facilities or infrastructure will be permitted in the area affected by wilderness. Any roads in wilderness areas will be closed to public vehicle access.

# 4.3.1 Visitor Facilities and Access

# Camping and Day Use Areas

There are basic camping and day use facilities in the Park.

Barokee camping and day use area has about 3 picnic sites and 11 secluded campsites set amid banksias and eucalypts. Water is available from a small stream that runs through wet heath. The camping area is degraded from the moderately high levels of visitor use and relatively uncontrolled vehicle access. The soils derived from granite are highly susceptible to compaction, loss of ground cover and erosion.

Native Dog camping and day use area has 10 campsites (some suitable for caravans) but it is not as heavily used as Barokee. The camping area is not formalised and the site is susceptible to degradation, although not to the extent evident at Barokee. Water is available from a nearby creek. Walking tracks lead to the major features of the Park and link the two recreation nodes. The capacity of both sites meets the expected needs of visitors for the period of this plan.

#### Objective

 To maintain the current low-key visitor facilities and capacity whilst minimising impacts on the Park.

# Strategies and Actions

- Within the existing disturbed area, redevelop Barokee camping and day use area to prevent further site degradation, while retaining the existing 11 campsite capacity.
- Install signage at Barokee to separate camping and day use areas.
- Limit Native Dog camping area to no more than 12 campsites.
- Assess the need to upgrade or relocate toilets at Native Dog and Barokee to minimise any environmental impacts.
- Permit caravans only at the Native Dog camping and day use area.
- Public vehicles will continue to be prohibited beyond the Round Mountain gate due to site difficulties at the summit. Walkers, however, will be permitted to access the road to the summit.

# Walking Tracks

Cathedral Rock circuit track leads from the Barokee camping and day use area through sub-alpine woodland around Cathedral Rock and return. The walk is 5.8 kilometres and a short walking track leads off the track to the top of Cathedral Rock. The rocks can be slippery and this walk requires some rock clambering.

The Warrigal Track is a one kilometre signposted circuit walking track from Native Dog Creek camping and day use area. This is an easy walk through dry woodland.

A longer 7.4 kilometres return walking track leads through a mosaic of vegetation types to Woolpack Rocks. Five hundred metres before the summit a diversion from the Woolpack Rocks Track can be taken to Barokee camping and day use area, crossing the range to the other side of the Park. This walk from Native Dog Creek to Barokee camping and day use areas is 10.4 kilometres.

Visitors can also walk the closed road to the summit of Round Mountain. Currently a sign at the gate discourages the entry of visitors, including walkers, as a security measure for the Commonwealth aviation facility on the summit although the sign had been intended to deter vehicular access on this section of road.

Erosion can be severe on the granitic soils in the Park, with extra care being needed with respect to track grade and drainage. The NPWS is currently undertaking erosion control works on walking tracks in the Park.

# Objective

To provide a range of walking opportunities in the Park.

- The existing walking track network will be retained. Some realignment of existing tracks may occur where necessary to protect the environment, but there will be no expansion of the existing walking track network.
- Install a sign at the Round Mountain gate indicating that visitors are welcome to walk along the road to the summit.

# 4.3.2 Interpretation and Promotion

The Park is promoted in tourist literature and a park brochure that is distributed from the Rainforest Centre at Dorrigo, the Regional Office at Armidale and from the Park. There are no interpretative displays in the Park, however, an orientation and interpretation display is located on the main entrance road to the Barokee camping and day use area.

Promoting of public awareness of the conservation objectives, values and recreational opportunities within the park is an important aspect of visitor use. The NPWS Discovery Program conducts interpretative walks to enhance public awareness and cooperation with management objectives and would compliment the existing promotion of the park. Future promotion of the park requires planning with the regional tourism agencies to ensure that promotion is consistent with the conservation objectives of the park.

#### Objectives

 To enhance visitor appreciation and awareness of the values and conservation objectives of the Park.

# **Strategies and Actions**

- Promote an appreciation and understanding of the Park by conducting Discovery Programs during school holidays.
- Liaise with the local and regional tourism bodies to promote the Park.
- Install interpretative signs at both camping/day use areas, informing visitors of the values of the Park and the recreation opportunities available to them.
- Provide an interpretative display near the Waterfall Way entrance advising caravan owners that access to the Park with caravans in tow is only available from the Ebor-Guyra Road to the Native Dog camping and day use area.

#### 4.3.3 Commercial Activities

Commercial activities in the Park require a licence under the Act. There are currently three commercial operators using the Park.

## Objective

• To ensure that any commercial activities are in accordance with the objectives of this plan and do not threaten Park values or conflict with existing Park users.

- Only passive, nature-based recreation activities will be considered for a commercial activity licence.
- Ensure all commercial operators are licensed.
- Commercial users will not be permitted to occupy more than half the campsites at each camping area at any one time.
- If considered necessary by the Regional Manager, limits may be placed on the size of any commercial groups and frequency of visits. This would be done to ensure that the low-key recreation setting in the Park is retained, and use is not in conflict with other users and is ecologically sustainable.

#### 4.3.4 Research and Education

The NPWS will undertake research on the natural and cultural resources in the Park and encourage appropriate research by other organisations and individuals where there is potential benefit to the management of the Park. All research will be subject to the NPWS policy and procedures relating to the granting of permits, the conduct of research, and the provision and dissemination of results.

#### Objective

 To facilitate appropriate education and research into the natural and cultural values of the Park, or threats to values, using methods that have minimal impact on the environment.

# Strategies and Actions

 Assess research proposals for their likely impact on the environment and their potential benefit to the management of the Park.

## 4.4 Management Operations

#### 4.4.1 Management tracks

The NPWS will maintain a road and trail network within the Park to continue to allow for public access and management activities (refer to the figure 2).

#### Objective

 To provide a system of management roads and trails for park protection and management purposes.

#### Strategies and Actions

Assess all roads and trails and close, and where necessary rehabilitate, any that
do not have a specific management function.

# 4.4.2 Boundary Fencing

The NPWS is not bound by the *Dividing Fences Act 1991*, however, the NPWS may contribute to fencing costs under a boundary fencing agreement with neighbours.

#### Objective

• In liaison with neighbours, to provide adequate fencing on the Park boundary to prevent stock incursion.

- Periodically inspect boundary fences to ensure they are adequate to exclude stock.
- Fence those sections of the Park boundary that adjoin stock grazing properties.
- Assess requests for assistance with boundary fencing on a case by case basis.
- Remove all internal fences in the park except for either side of the Round Mountain gate (to prevent vehicles driving around it) and timber posts and house garden fencing at Gwenda Gardens.

# 4.4.3 Travelling Stock Route

A travelling stock route is located on the northern boundary of the Park adjacent to the Guyra Road. This travelling stock route is not fenced, however, because it is infrequently used. Cattle from the stock route have not been a problem in the Park. There is also a travelling stock route on the southeast boundary of the Park along the Ebor-Armidale Road.

#### Objective

To ensure the travelling stock routes have minimal impact on the Park.

# Strategies and Actions

 Monitor the use and impact of the travelling stock routes and fence if required to keep stock out of the Park.

## 4.4.4 Park additions

# Round Mountain - leased area to Airservices Australia and trig reserve

An air navigation facility, used for the control and guidance of aircraft, is located on the summit of Round Mountain. An area of Crown land 40 x 40 metres is leased to Airservices Australia under section 69a of the *Crown Lands Act 1989*. This lease lies within a much larger trig reserve that measures 400 x 400 metres.

A trig reserve with these dimensions if not required and it is recommended that the trig reserve, possibly excluding the Airservices Australia lease, be incorporated into the Park. (Even if the Airservices Australia lease was also incorporated into the Park it will be regarded as an existing interest pursuant to section 39 of the *National Parks and Wildlife Act* and would be allowed to continue unaffected).

#### Objective

• To manage the land that has been acquired on Round Mountain for its conservation values, while ensuring the protection of Airservices Australia infrastructure and the trig point.

## Strategies and Actions

 Pursue the inclusion of the trig reserve into the Park (whether or not the area leased by Airservices Australia is included).

#### Unmade road reserves.

There are two unmade Crown road reserves in the Park (refer to figure 2).

The main road reserve, which is a 60 metre wide exclusion from the Park, runs from Round Mountain in a northwesterly direction to the Park boundary. A shorter, 20.11 metre wide road reserve runs through lot 110 in the northwestern section of the Park, terminating within the Park.

Neither road reserve will be required for future access and should be incorporated into the Park.

#### Objective

• To facilitate better park management, rationalise the boundary of the Park through appropriate land acquisition.

# **Strategies and Actions**

 Seek to incorporate into the Park the two unmade Crown road reserves in the northwestern section of the Park.

#### 4.4.5 Easements

# Round Mountain Road

The Round Mountain road easement (refer to figure 2) was gazetted on the 8th October 1970 by the Commonwealth Government. This was to guarantee access to the Airservices Australia facility. This road now traverses the Park and for most of its length and also provides public access to the Barokee camping and day use area. The easement is 15.2 metres wide, and is considered an existing interest under section 39 of the Act.

#### Objective

• To define responsibilities with respect to the maintenance of the Round Mountain Road.

# Strategies and Actions

- Negotiate an access licence with Airservices Australia that includes the maintenance of the access road to the Round Mountain facility.
- New easements for non-NPWS infrastructure will not be approved unless no other reasonable alternative exists and the development will not have a significant impact on park values.

## Country Energy powerline easement

The Park has easements for powerlines and the Snowy Creek Diversion (refer to section 4.1.1) that are existing interests under section 39 of the Act.

The overhead powerlines to Round Mountain are intrusive and involve the clearing of vegetation along the easement under the lines. When the power line needs major repairs or replacement the NPWS will seek to have a replacement system which is less visually intrusive and less prone to cause wildfire.

#### Objective

 To ensure licence conditions for powerlines protect the natural and cultural values of the Park.

# **Strategies and Actions**

- Easements for powerlines and the water diversion that are covered under section 39 of the Act will be licensed so as to ensure Park values are not threatened.
- Negotiate with Country Energy and Airservices Australia to have the overhead powerlines to Round Mountain made less visually intrusive by bundling the cables, placing them underground, or by some other suitable method.

#### 5. PLAN IMPLEMENTATION

This plan is part of a framework of management developed by the National Parks and Wildlife Service (NPWS). The framework includes the *National Parks and Wildlife Act*, the NPWS Corporate Plan, field management policies, established conservation and recreation philosophies, and strategic planning at corporate, Directorate and regional levels.

The orderly implementation of this plan will be undertaken within the annual programs of the NPWS North Coast Region. Priorities, determined in the context of district and regional strategic planning, will be subject to the availability of necessary staff and funds, and to any specific requirements of the Director-General and Minister.

Regional programs are subject to on-going review, within which works and other activities carried out in Cathedral Rock National Park will be evaluated in relation to objectives laid out in this plan.

The environmental impact of all development proposals will continue to be assessed at all stages of the development, and any necessary investigations undertaken in accordance with established environmental assessment procedures.

Section 81 of the *National Parks and Wildlife Act* requires that this plan is carried out and given effect to and that no operations shall be undertaken in relation to the national park unless they are in accordance with the plan. However, if after adequate investigation, operations not included in the plan are found to be justified, this plan may be amended in accordance with Section 76(6) of the Act.

As a guide to the orderly implementation of this plan, actions are summarised and prioritised in the following categories:

**High** priority actions are those imperative to the achievement of management objectives identified in this Plan. They need to be implemented in the near future to prevent degradation of the natural and cultural values or physical resources of the Reserve, may incur significant costs associated with rehabilitation at a later date, and/or present an unacceptable risk to the public.

**Medium** priority actions are those that are necessary to achieve management objectives but will be implemented as resources become available because the time frame for their implementation is not urgent.

**Low** priority actions are desirable to achieve management objectives but can wait until resources become available.

The implementation of this plan will be undertaken within the NPWS North Coast Region annual programs. The undertaking of these activities is subject to the availability of necessary staff and funds and to any special requirements of the Director General or Minister.

Actions (summary)	Plan	Priority
,	section	
Investigate the feasibility of restoring the natural hydrology in the Park.		Low
Negotiate a licence for the Snowy Creek Diversion if the diversion is to continue operating.		Medium
Identify areas of accelerated soil erosion and implement measures to rehabilitate affected areas.		High
Undertake further rehabilitation of the old mining site at Biscuit Creek.		Medium
Curtail threatening processes from having further impact upon sensitive vegetation communities, such as eliminating wildfire in swamp and alpine/subalpine plant communities.		High
Monitor, and where appropriate record, the distribution and abundance of threatened species in the Park.		Medium
Finalise the draft fire management plan for the Park by 2004, ensuring that the special needs of fire sensitive vegetation communities are fully addressed in the plan.		High
Negotiate an agreement with Airservices Australia with regard to a fire radiation zone surrounding their facility on Round Mountain. Alternatives to burning the fire radiation zone will be investigated.		High
Pending the adoption of the fire management plan, no prescribed burning will be undertaken, except where essential to provide protection to the Airservices Australia facility on Round Mountain		High
The old mining dams will be retained for fire fighting purposes.	4.1.5	Medium
Prepare a pest species management plan for the Park.	4.1.6	High
Retain exotic species at Gwenda Gardens only if determined to be of historic significance until they scenese. Exotic plants will not be replaced or allowed to regenerate or become invasive.		Medium
Undertake fox and feral pig control programs in the Park consistent with the recommendations of threat abatement and pest species management plans.		High
Assess the impacts of wild dogs in the park and on neighbouring land. If the impact from predation is significant, undertake a cooperative wild dog control program with neighbours along the Park boundaries in accordance with NPWS policy.		Medium
The current feral pig control programs will be maintained in the Park.		High
Assist in the preparation and implementation of a wild dog management plan.		Medium
Encourage research into Aboriginal cultural heritage.		High
Prepare management strategies to protect cultural heritage sites and features.		Medium
Work with the Aboriginal community to interpret the Aboriginal cultural values of the park.		Medium
Undertake a cultural heritage study of the Gwenda Gardens.	4.2.2	Low

Actions (summary)		Priority
As far as practical, protect the timber tank barrier from fire.		Medium
Within the existing disturbed area, redevelop Barokee camping and day use area to prevent further site degradation, while retaining the existing campsite capacity.		High
Install signage at Barokee to separate camping and day use areas.	4.3.1	Medium
Assess need to upgrade or relocate toilets at camping areas.	4.3.1	High
Install a sign at the Round Mountain gate indicating that visitors are welcome to walk along the road to the summit.		Medium
Install interpretative signs at both camping/day use areas, informing visitors of the values of the Park and the recreation opportunities available to them.		Medium
Provide an interpretative display near the Waterfall Way entrance advising caravan owners that access to the Park with caravans in tow is only available from the Ebor-Guyra Road to the Native Dog camping and day use area.		Medium
Ensure all commercial operators are licensed.	4.3.3	High
Assess all roads and trails, and where necessary close and rehabilitate any that do not have a specific management function.		Medium
Periodically inspect boundary fences to ensure they are adequate to exclude stock.		Medium
Fence those sections of the Park boundary that adjoin stock grazing properties.		High
Remove all internal fences in the Park except for either side of the Round Mountain gate and the timber posts and house garden fencing at Gwenda Gardens.		Medium
Monitor the use and impact of the travelling stock routes and fence if required to keep stock out of the Park.		Medium
Pursue the inclusion of the trig reserve into the Park (whether or not the area leased by Airsevices Australia is included).		Medium
Seek to incorporate into the Park the two unmade Crown road reserves in the northwestern section of the Park.		Low
Negotiate an access licence with Airservices Australia that includes the maintenance of the access road to the Round Mountain facility.		High
Easements for powerlines and the water diversion that are covered under section 39 of the Act will be licensed so as to ensure Park values are not threatened.		Medium
Negotiate with Country Energy and Airservices Australia to have the overhead powerlines to Round Mountain made less visually intrusive by bundling the cables, placing them underground, or by some other suitable method.		Medium

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**Appendix 1: Significant Flora of Cathedral Rock National Park** 

Species name	Common name	Conservation Significance
Acacia mitchellii	mitchells wattle	rare in NSW
Acacia nana subsp. eborensis	acacia sp.	ROTAP 2VCi, endemic to high altitude granite sites in the Ebor area
Caesia alpina	alpine grass lily	northern limit
Callitris oblonga	dwarf cypress pine	ROTAP 3VCa, TSC Act
Dodonaea serratifolia	New England hopbush	ROTAP 2RC-
Elaeocarpus holopetalus	black olive berry	northern limit
Eucalyptus codonocarpa	bell-fruited mallee	ROTAP 3RC, southernmost distribution
Gaultheria appressa	white waxberry	northern limit
Gentiana wissmannii	New England gentian	ROTAP 2VC-,endemic to Round Mountain District
Grevillea acanthifolia subsp. stenomera	prickly grevillea	ROTAP 3RC-
Hibbertia sp. aff. rufa	swamp guinea flower	ROTAP 3RC-
Leptomeria drupacea	leafless currant bush	rare in NSW
Leucopogon cicatricatus	apple beard heath	ROTAP 3RC-
Lycopodium myrtifolium	long clubmoss	ROTAP 3KC
Nothofagus moorei	Antarctic beech	western limit of occurrence in this region
Olearia alpicola	alpine daisy bush	northern limit
Olearia phlogopappa	alpine daisy bush	northern limit
Oreobolus distichus	fan tuft rush	regional significance
Ozothamnus adnatus	small-leaved everlasting	ROTAP 3KC-
Persoonia procumbens	mat geebung	ROTAP 2RC-
Pratia surrepens	swamp pratia	northern limit
Ranunculus pimpinellifolius	bog buttercup	northern limit
Scaevola hookeri	creeping fan-flower	regionally significant
Styphelia perileuca	styphelia perileuca	ROTAP 2VC-
Trochocarpa sp.	mountain tree heath	near northern limit
Viola fusco-violacea	alpine violet	northern limit
Bulbophyllum bracteatum		southern limit

Source: Williams, J.B. (1997), Briggs and Leigh 1996, Sheringham and Westerway (1995), NPWS (1997).