

**COCOPARRA NATIONAL PARK AND COCOPARRA NATURE RESERVE
PLAN OF MANAGEMENT**

NSW National Parks and Wildlife Service

March 1996

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FOREWORD

Cocoparra National Park and Cocoparra Nature Reserve are located about 25 km northeast of Griffith in the Riverina District of southern NSW. They protect the dramatic scenery of the southern half of the Cocoparra Range, a large number of Aboriginal sites and significant remnant woodland communities in an area which has been largely cleared for agriculture. The park is an important recreation resource in the Riverina, being one of the few remaining areas of natural environment.

This plan of management outlines measures for protection of the natural and cultural values of the area with emphasis on:

- regeneration of native vegetation on the cleared valley floors;
- control of introduced species;
- increasing the awareness of visitors of the special status of the area; and
- reducing the impact on the park by visitors, particularly by reducing the amount of firewood used.

Opportunities for walking, picnicking, camping and nature study will continue to be provided in the park and will be improved by upgrading and extension of some walking tracks and provision of additional interpretive information.

This plan of management establishes the scheme of operations for Cocoparra National Park and Cocoparra Nature Reserve. In accordance with the provisions of Sections 75 and 76 of the National Parks and Wildlife Act, 1974, this plan of management is hereby adopted

PAM ALLAN

**Minister for
the Environment**

CONTENTS

	Page
FOREWORD	
1. INTRODUCTION	1
2. MANAGEMENT CONTEXT	2
2.1 NATIONAL PARKS AND NATURE RESERVES IN NSW	2
2.1.1 National Parks	2
2.1.2 Nature Reserves	2
2.2 COCOPARRA NATIONAL PARK AND COCOPARRA NATURE RESERVE	3
2.2.1 Location and Regional Setting	3
2.2.2 Importance of Cocoparra National Park and Cocoparra Nature Reserve	3
3. OBJECTIVES OF MANAGEMENT	7
3.1 GENERAL OBJECTIVES FOR NATIONAL PARKS AND NATURE RESERVES	7
3.2 SPECIFIC OBJECTIVES FOR COCOPARRA NATIONAL PARK AND COCOPARRA NATURE RESERVE	7
3.3 OVERALL STRATEGY	8
4. POLICIES AND FRAMEWORK FOR MANAGEMENT	9
4.1 NATURE CONSERVATION	9
4.1.1 Geology, Landform and Soils	9
4.1.2 Native and Introduced Plants and Animals	10
4.1.3 Fire Management	14
4.2 CULTURAL HERITAGE	15
4.2.1 Aboriginal Sites	16
4.2.2 Historic Places	17
4.3 USE OF THE AREA	19
4.3.1 Promotion and Interpretation	19
4.3.2 Recreation Opportunities	20
4.3.3 Research	22
4.3.4 Management Operations	23
5. PLAN IMPLEMENTATION	25
REFERENCES	27
MAPS	
Cocoparra Nature Reserve	centre pages
Cocoparra National Park	following centre pages

1. INTRODUCTION

The National Parks and Wildlife Act, 1974, requires that a plan of management be prepared for each national park and nature reserve. A plan of management is a legal document that outlines how the area will be managed in the years ahead. It can be revised and rewritten if necessary to accommodate changes in management practices.

The procedures for the adoption of a plan of management are specified in the Act and involve five stages:

- * The Director-General gives notice that a plan of management has been prepared.
- * The plan is placed on public exhibition for at least one month and any person may comment on it.
- * The plan and copies of all representations are referred to the National Parks and Wildlife Advisory Council for consideration.
- * The Director-General submits the plan, together with the recommendations of the Advisory Council, to the Minister.
- * The Minister may adopt the plan, with or without amendment, after considering the recommendations of the Advisory Council or may refer the plan back to the Director-General and Council for further consideration.

A draft plan of management for Cocoparra National Park and Cocoparra Nature Reserve was placed on public exhibition for three months from August to November 1994. Eight representations were received during the period of public exhibition which raised thirteen issues.

All comments received were referred to the National Parks and Wildlife Advisory Council for its consideration and advice. The comments and suggestions of the Advisory Council were, in turn, considered by the Minister before adopting this plan.

Once a plan has been adopted by the Minister no operations may be undertaken within the park and reserve except in accordance with the plan.

The planning process leading to the development of this plan has involved the collection and use of information, which for reasons of document size, has not been included in the plan. For additional information or enquires on any aspect of the plan, contact the Service's Griffith District Office at 105 Banna Avenue, Griffith or by phone on (069) 62 7755.

2. MANAGEMENT CONTEXT

2.1 NATIONAL PARKS AND NATURE RESERVES IN NEW SOUTH WALES

2.1.1 National Parks

The national park concept was introduced into Australia through the establishment of Royal National Park in 1879, only seven years after the world's first national park was created at Yellowstone in the United States of America.

The International Union for the Conservation of Nature and Natural Resources (IUCN) in 1994 defined a national park as:

"A natural area of land/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 the spiritual, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible."

National parks are part of the regional pattern of land use. The management of a national park aims to minimise disturbance to natural and cultural resources. Other land uses, e.g., 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 range of land uses in a region.

2.1.2 Nature Reserves

Fauna reserves in New South Wales were first established under the Fauna Protection Act of 1948. Under the National Parks and Wildlife Act of 1967 fauna reserves were reclassified as nature reserves. The Fauna Protection Act was replaced by the National Parks and Wildlife Act, 1974.

Under the National Parks and Wildlife Act, nature reserves are areas of special scientific interest containing wildlife or natural environments or natural phenomena.

The purposes of nature reserves are defined in the Act as:

- "(a) the care, propagation, preservation and conservation of wildlife;
- (b) the care, preservation and conservation of natural environments and natural phenomena;
- (c) the study of wildlife, natural environments and natural phenomena; and
- (d) the promotion of the appreciation and enjoyment of wildlife, natural environments and natural phenomena.

Nature reserves are valuable refuge areas where natural processes, phenomena and wildlife can be studied. They differ from national parks which include as a major objective the provision of appropriate recreation opportunities.

2.2 COCOPARRA NATIONAL PARK AND COCOPARRA NATURE RESERVE

2.2.1 Location and Regional Setting

Cocoparra National Park and Cocoparra Nature Reserve are located about 25 km northeast of Griffith in the Riverina District of southern NSW (see inset on map following page 15). They extend for approximately 27 km north-south along the southern part of the Cocoparra Range and have an average width of 5 km.

The nature reserve was dedicated in 1963 and has an area of 4 647 ha. The national park was reserved in 1969 and has an area of 8 358 ha. The establishment of both areas followed strong local interest and negotiation by a committee of landholders and others.

The national park and nature reserve are bounded at the northern and southern ends by Conapaira South and Binya State Forests respectively. This block of vegetated land is surrounded by largely cleared agricultural land, including the intensively developed irrigation area to the south. Several towns; notably Griffith, Leeton and Narrandera, are located within a relatively short distance of the park and reserve.

2.2.2 Importance of Cocoparra National Park and Cocoparra Nature Reserve

Cocoparra National Park and Cocoparra Nature Reserve are located within the Cobar Plains land system of NSW (described by Morgan and Terry, 1992) and protect a number of important natural, cultural and recreation features. The park and reserve are two of a number of small to moderately sized conservation areas on the central and south-western slopes and plains of NSW which sample early to mid Palaeozoic rocks of the Lachlan Fold Belt of Eastern Australia. These regionally important protected areas include the Conimbla Range, Weddin Mountains and Nangar national parks and Currumbenya, The Rock and Table Top nature reserves.

The major conservation area, Yathong Nature Reserve/Nombinnie Nature Reserve/Round Hill Nature Reserve, lies some 100 kilometres to the north of the Cocoparra Range and also includes areas of Lachlan Fold Belt geology. Other large national parks, Kosciusko, Deua, Wadbilliga, Budawang and Kanangra-Boyd in eastern NSW also occur within the Lachlan Fold Belt but lie within the tableland and/or coastal regions of the State.

Physical Background

Cocoparra National Park and Cocoparra Nature Reserve consist of upper Devonian siltstone, sandstone, pebbly sandstone and conglomerate which are part of a sequence of strata which includes, in increasing age, the Rankin Formation, the Mailman Gap Conglomerate Member and the Jimberoo Member and which are the upper layers of the Cocoparra Group of rocks in south western NSW. The Cocoparra Group stretches from north of the Lachlan River to south of the Murrumbidgee River, through Griffith and forms a series of rocky ranges between Hillston and Narrandera, of which the Cocoparra Range is one of the highest and widest.

The rocks of the Cocoparra Group were deposited in a large geological structure known as the Ravendale Terrestrial Basin between 345 and 360 million years ago in an environment of inland floodplains and lakes. At this time major-land building events were taking place in what is now the central part of NSW where sediments previously laid down beneath the sea were uplifted and distorted into a range and basin type of landscape. The Ravendale Terrestrial Basin was one of two major basins developed in these older marine deposits within NSW and received large amounts of eroded

material from surrounding highlands which were subsequently compressed and altered to form the rocks of south-western NSW.

The rocks of the Cocoparra Range outcrop as the eastern limb of the Cocoparra Syncline; a local structure which formed within the larger Ravendale Terrestrial Basin. Most of the Cocoparra Syncline as well as the older basement rocks on which it rests are buried in the close vicinity of the park by unconsolidated Quaternary sediments.

These surrounding sediments have originated in comparatively recent times, partly from the local ranges and hills but also, in great measure from the tablelands and montane regions of eastern NSW. The material for these great outwash fans was transported by the westward flowing ancestral Lachlan, Murrumbidgee and Murray river systems during periods of high rainfall and snow melt following the various Pleistocene ice ages in Australia. The fans buried the central and south-western slopes and plains as far west as a line between Balranald and Ivanhoe.

Willandra National Park which lies to the north west of the Cocoparra Range is situated on Willandra Creek; an important distributary channel of this old system of rivers but which now carries water only in flood time.

The Cocoparra Range is one of the highest, widest and most geologically complex features in the district and is the most south westerly range in the state apart from the much smaller and lower McPhersons Range which lies 10km to the west.

Native Plant and Animal Communities

Because of its width, height and broken landform the Cocoparra Range has a greater variety of habitats than other ranges in the district. It also protects the largest area of natural vegetation cover. This contrasts with the plains surrounding the range which have been intensively modified for commercial agricultural purposes, including irrigation. These plains were previously covered in mallee or an acacia or a pine/box woodland and the patches of vegetation on the valley floors of the range are scarce remnants of this formerly extensive woodland of the plains.

Cocoparra National Park and Cocoparra Nature Reserve are not therefore typical of the original plains vegetation of the region which has long been cleared for agricultural purposes. They do, however provide refuge for a number of plant and animal communities that are typical of the semi-arid ranges of this part of the State. Accordingly, not only is the Cocoparra Range an "island" in a buried landscape but also an "island" of naturalness in an agricultural landscape.

The Cocoparra Range is close to the most westerly limit of distribution for a large number of plant and animal species which occur more commonly on the southern tablelands or in cypress pine woodlands of the western slopes and ranges. It is also the easterly limit of species which occur on the western plains. For example the ranges of the yellow rumped pardalote (*Pardalotus xanthopygus*), which usually inhabits mallee, and the spotted pardalote (*Pardalotus punctatus*) which occurs from the coast to central NSW, overlap in the Cocoparra Range and hybrid forms of these two species are found in the national park and nature reserve.

The national park and nature reserve protect the habitat requirements of at least three rare and threatened plant species and eight endangered bird species. These are listed in section 4.1.2. It is thought that all but one of the endangered bird species breed in the two areas. The park and reserve are therefore important for conservation of these species.

The plants of the Cocoparra Range are featured in 'A Collection of Australian Wildflower Illustrations' by local artist Patricia Weare.

Landscape

The high, dry broken landscape of the Cocoparra Range is a stark contrast to the surrounding plains and irrigated farms and is an obvious landmark.

The deep narrow valleys, folded and eroded rock faces, waterfalls, and varied vegetation provide interesting and in places spectacular scenery. Panoramic views of the plains are available from the peaks.

Cultural Heritage

A large number of Aboriginal sites have been found in the national park and nature reserve. Little is known of the Aboriginal history or economy of the eastern part of the Western Division and a large part of the territory of the Wiradjuri nation has been modified for agriculture. The Aboriginal sites in the park and reserve are therefore valuable for improving the understanding of Aboriginal occupation of the region.

The strong attachment of Aboriginal people to their land and culture is now being acknowledged by the European community. Archaeological sites are important to Aboriginal communities as they are a testament to their culture's great antiquity.

A range of historic places of local interest are found in the park and reserve, dating from early exploration to the remains of a space observatory and other features from the 1950s.

Educational Use

The park and reserve are one of the few naturally vegetated areas in the district and are valuable for field studies because of their variety of features and easy accessibility. They are used by schools and tertiary institutions in the area and by groups such as scouts.

Several places in the park provide excellent opportunities to study the geological structure of the range. Woolshed Flat for example offers a view of the cross section of the range while Ladysmith Glen (Jacks Creek) shows in detail many geological features of the park including bedding, folding and faulting.

The clearings and historic places in the park are valuable for understanding the history of the area. Most other similar historic features in the district are on private land and therefore not readily accessible to the public.

Recreation

The Cocoparra Range has been used for recreation since the initiation of the Murrumbidgee Irrigation Scheme and the development of towns in the area.

The national park is now one of the few areas in the Riverina where people can enjoy the natural environment and is an important recreational resource for the local community. It also receives a small amount of tourist use, often combined with visits to other places in the district such as Willandra National Park.

The national park provides extensive opportunities for walking in rugged and interesting scenery. Kangaroos and many of the birds such as emus, parrots, cockatoos, wrens, raptors and honeyeaters are easily seen by visitors. In an otherwise flat landscape, the cliffs and waterfalls of the park are of particular interest. Spring wildflower displays are another attraction of the area.

The significance of Cocoparra National Park and Cocoparra Nature Reserve can be summarised:

Regional nature conservation value: The national park and nature reserve;

- are part of a group of conservation areas that protects a representative sample of habitats once widespread in the central western slopes and plains of NSW;
- protect the habitats of native plants and animals in an area which has been largely cleared for agriculture; and
- contain populations of several rare, vulnerable and threatened plant and animal species.

Local cultural heritage conservation value: The national park and nature reserve:

- contain a large number of relatively undisturbed Aboriginal sites which demonstrate aspects of Aboriginal use of the district; and
- have local historical value as they contain a variety of places which illustrate the history of exploration, transport and pastoral use of the district.

Local Environmental Education Values: The national park offers scarce environmental educational opportunities because it is one of the few remaining areas of natural vegetation in the district and contains interesting natural and cultural features not readily accessible elsewhere in the district.

Local Recreational and Tourist Value: The national park offers opportunities for day use and camping in a natural setting for both the local community and visitors to the region.

3. OBJECTIVES OF MANAGEMENT

3.1 GENERAL OBJECTIVES FOR NATIONAL PARKS AND NATURE RESERVES

The following general objectives relate to the management of national parks in New South Wales:

- * the protection and preservation of scenic and natural features;
- * the conservation of wildlife;
- * the maintenance of natural processes as far as is possible;
- * the preservation of Aboriginal sites and historic features;
- * the provision of appropriate recreation opportunities; and
- * the encouragement of scientific and educational enquiry into environmental features and processes, prehistoric and historic features and use patterns.

3.2 SPECIFIC OBJECTIVES FOR COCOPARRA NATIONAL PARK AND COCOPARRA NATURE RESERVE

In addition to the above general objectives, the management of Cocoparra National Park and Cocoparra Nature Reserve will be subject to the following specific objectives:

- * Protection of both areas as a representative sample of the semi-arid range and hill country of the central western plains of NSW.
- * Protection of native plant and animal communities of the national park and nature reserve, particularly those species which are rare and endangered or for which the park and reserve are a significant proportion of their habitat;
- * Protection of the high landscape value of the Cocoparra Range;
- * Provision of opportunities for low key day use and camping in the park;
- * Promotion of public understanding and appreciation of the natural values of the Cocoparra Range and of its cultural heritage, particularly:
 - the importance of Cocoparra National Park and Cocoparra Nature Reserve as part of a system of conservation areas protecting remnant samples of the semi-arid ranges of the south-western slopes and plains of NSW;
 - the fragile nature of the Cocoparra Range and the importance of appropriate use of the national park and nature reserve so as to minimise disturbance to the nature conservation values of the two areas; and
 - the pattern of Aboriginal and non-Aboriginal use.
- * Emphasis within the local community, particularly neighbours of the park, of the importance and purpose of management programmes relating to the protection of natural features and the control of fire, weeds and feral animals.

- * Encouragement of sympathetic management of adjacent lands and minimisation of any adverse effects of park and reserve management practices on neighbouring lands.

3.3 OVERALL STRATEGY

Cocoparra National Park and Cocoparra Nature Reserve will continue to be protected as an important remnant natural area, with emphasis on the regeneration of previously disturbed areas.

There will be no expansion of visitor facilities in Cocoparra National Park apart from extending the walking track system in the Woolshed Flat area. Improved signage and interpretation will be undertaken to increase visitor and community awareness of the value and special needs of the area.

High priority will be given to on-going liaison with neighbouring landholders about control of introduced species, fire management and other issues of mutual interest.

4. POLICIES AND FRAMEWORK FOR MANAGEMENT

This chapter contains the policies and framework for the management of Cocoparra National Park and Cocoparra Nature Reserve together with relevant background information. Policies are summarised under the following section headings:

- 4.1 Nature Conservation
- 4.2 Cultural Heritage
- 4.3 Use of the Area

The policies established in this plan of management provide the framework for management consistent with anticipated resources available to the Service and anticipated community trends over the next five to ten years.

The actions identified are those to which priority will be given in the foreseeable future. Other management actions may be developed over the life span of this plan consistent with the policies set out in the plan.

Where not specifically provided for in this plan, management will also be in accordance with the National Parks and Wildlife Act and with general Service policies.

4.1 NATURE CONSERVATION

4.1.1 Geology, Landform and Soils

The Cocoparra Range consists of Upper Devonian sandstones and conglomerates interbedded with finer shales. These sediments were subsequently folded into a synclinal structure (the Cocoparra Syncline) with associated complex geological features such as folds and which have been eroded into the 'hogback' formation which now outcrops as the Cocoparra Range.

The crest of the range lies close to the eastern side of the national park and nature reserve and has a series of peaks of which the highest is Mount Bingar at 455m above sea level. Along the eastern edge of the national park the range falls steeply and has formed a broken rocky escarpment. Further north in the nature reserve the range opens out and is generally lower.

The more gentle western slope of the range has been eroded into a series of deep east-west valleys. These vary from Ladysmith Glen, a narrow gorge cut by Jacks Creek, to the relatively broad level valley formed by Woolshed Creek.

The valleys are fringed by steep rocky and heavily eroded sides containing deep overhangs and waterfalls. The creeks and waterfalls run only for short periods after heavy rain or for longer periods after wet winters. There is permanent water in some springs and soaks.

Soils on the slopes are shallow clayey sands and are easily eroded. Erosion is a natural process in the area but in some places it has been accelerated by construction of roads and tracks, particularly on steep slopes and at creek crossings. Some erosion control work is needed on the tracks. Soil erosion is also a problem where goats concentrate around waterholes in the park and reserve during dry periods. Control of goats in the two areas therefore is an important aspect of soil erosion control.

Deep sediments have built up on the valley floors from erosion of the range, forming red and brown clayey sand and loam soils.

Policies

- * The high scenic values of the park and reserve will be maintained by appropriate siting and design of any development or works.
- * All management activities within the park will, where relevant, be guided by appropriate sediment and soil erosion control measures.
- * Where soil erosion occurs as a result of recreation, feral animals or management use, remedial measures will be undertaken.
- * Extraction of gravel and other substances will not be permitted except for essential management purposes where no practical alternative is available. Sites will be rehabilitated following completion of extraction.

Action

- * Runoff control works and appropriate treatment of creek crossings will be undertaken on management tracks where necessary to prevent erosion.
- * Areas of accelerated soil erosion will be mapped.

4.1.2 Native and Introduced Plants and Animals

The vegetation of the park and reserve is typical of the semi-arid vegetation found on the ranges of the district. Species richness within the understorey is greater, however, on the sandstone ranges such as Cocoparra than on other geological types (Norris and Thomas, 1991).

The following vegetation communities are found in Cocoparra National Park and Cocoparra Nature Reserve.

Hill slopes support a woodland dominated by black cypress pine (*Callitris endlicheri*) which is the most common vegetation type in the park and reserve. Associated species are generally currawong (*Acacia doratoxylon*), Dwyers gum (*Eucalyptus dwyeri*) and red stringybark (*E. macrorhyncha*). Shrubs include *Calytrix tetragona*, *Grevillea floribunda*, *Melichrus urcolatus*, *Dodonaea viscosa*, *Phebalium obcordatum* and *Pomaderris* sp. Ground cover is normally sparse but after rain grasses and herbs such as *Wahlenbergia stricta*, *Stypandra glauca*, *Dianella laevis* and *Calostemma purpureum* cover the ground.

Sheltered slopes with deeper soils also support black cypress pine communities but the trees are taller and more dense with a greater variety of shrubs including *Acacia* spp, *Prostanthera ovalifolia* and *Exocarpus cupressiformis*.

Ridge-tops support similar species but the woodland is low and more open. Where trees are sparse, shrubs such as *Melaleuca uncinata*, *Cassinia laevis* and *Leptospermum trivalve* form dense stands. Dwyers gum often occurs as mallee on the ridges.

Gentle northwesterly slopes at the northern end of the nature reserve support an open woodland of bumble box (*Eucalyptus populnea*), drooping she-oak (*Allocasuarina stricta*), grey box (*E. microcarpa*) and yarran (*Acacia homalophylla*) with tussock grass (*Danthonia* sp.).

Lower slopes and valley floors support a taller woodland or forest of white cypress pine, (*Callitris glaucophylla*) and bumble box. Other species include mugga

ironbark (*E. sideroxylon*), kurrajong (*Brachychiton populneum*), rosewood (*Heterodendrum oleifolium*) and, on stream lines, yellow box (*E. melliodora*) and Dwyers gum. The ground cover consists of grasses and shrubs and is more open than on the slopes and ridge-tops.

Rare, vulnerable and threatened plant species occurring in the park and reserve include the plants, *Lomandra patens*, *Pomaderris cocoparrana* and *Phebalium obcordatum*. These species occur on the hilltops and are not threatened by recreational or management use. Little is known about their management needs.

The entire park and reserve were formerly grazed by domestic stock but regeneration since reservation has resulted in a progressive increase in vegetation density.

Selective logging of cypress pine and ironbark previously occurred on the flats and lower slopes and most of the flats were also cleared for grazing and cropping. Some of these logged and cleared areas are now covered with dense tree and shrub regrowth, particularly *Acacia deanei*, but large open areas remain, notably at Woolshed Flat and Five Mile Creek.

The valley floor vegetation is particularly important because it is limited in occurrence and is representative of the former vegetation of the surrounding cleared agricultural land. There are few remnants of this land type in central and western NSW which have not been severely modified by clearing and agricultural development. Accordingly valley floors are potentially very important areas for the conservation of native plants and animals if they can be revegetated. It is proposed that priority will be given to establishing a model program at Woolshed Flat for the regeneration of similar areas in western and central NSW. The model program will include a review of revegetation techniques and programs such as by mining companies and land care groups.

Most of the valleys in the national park contain recreation facilities. This inhibits regeneration of natural vegetation cover and hence reduces habitat diversity. Closure of recreation facilities to permit regeneration in two little-used valley floor areas is proposed in section 4.3.2.

Collection of wood for camping and cooking fires has a high impact on the vegetation around picnic areas and the camping area. Supply of wood from outside the park is expensive so it is necessary to reduce wood use to protect the important habitats of the valley bottoms. Measures to achieve this are included in section 4.3.2.

Introduced plant species include Patersons curse (*Echium plantagineum*), horehound (*Marrubium vulgare*), saffron thistle (*Carthamus lanatus*), Bathurst burr (*Xanthium spinosum*), and a number of pasture species. Most are of very minor occurrence but the first two are widespread on the open valley floors, particularly Woolshed Flat and Five Mile Creek. These are likely to be reduced as regeneration of natives occurs. Bridal creeper (*Myrsiphyllum asparagoides*) occurs in small patches in the Homestead Creek area. It has the potential to spread and invade woodland areas.

The Noxious Weeds Act 1993 took effect from 1 July 1993. The Act places an obligation upon public authorities to control noxious weeds on land that they occupy to the extent necessary to prevent such weeds spreading to adjoining lands. Other introduced species threaten the viability of native plant and animal communities and must be controlled and where possible eliminated.

Approximately 150 species of birds have been recorded in the park and reserve. Some species visit the area seasonally after rain or when eucalypts and shrubs are flowering. About one quarter of the species, however, are dependent upon the woodland habitats of the range and are resident in the area. These include the red-rumped parrot (*Psephotus haematonotus*), blue-faced honeyeater (*Entomyzon*

cyanotis), eastern yellow robin (*Eopsaltria australis*), rufous whistler (*Pachycephala rufiventris*), white-browed babbler (*Pomatostomus superciliosus*) and striated pardalote (*Pardalotus striatus*). The eroded rock faces of the range provide excellent nesting places for raptors such as the peregrine falcon (*Falco peregrinus*). Emus (*Dromaius novaehollandiae*) are commonly observed.

The monotreme echidna (*Tachyglossus aculeatus*) occurs in the national park and nature reserve. Thirteen other species of mammal have also been recorded in the park and reserve; eastern grey kangaroo (*Macropus giganteus*), western grey kangaroo (*Macropus fuliginosus*), red kangaroo (*Macropus rufus*), swamp wallaby (*Wallabia bicolor*), brushtailed possum (*Trichosurus vulpecula*), yellow-footed antechinus, (*Antechinus flavipes*) and seven species of bat including the white-striped mastiff bat (*Tadara australis*).

Possums and small mammals are uncommon. Remains of *Rattus sp.*, *Isoodon sp.* and *Pseudomys sp.* have been identified in owl pellets but have not as yet been recorded in the park or reserve. Similarly, red necked wallabies (*Macropus rufrogriseus*) have been reported adjacent to the nature reserve but have not yet been recorded within the park or reserve.

It is probable that numbers of possums and small mammals have been affected by previous habitat disturbance and may recover. Predation by cats (*Felis catus*) and foxes (*Vulpes vulpes*) may have a significant impact on native animals but large area control of these animals is not presently practicable.

More than 30 frog and reptile species have been recorded in the park and reserve including the spotted grass frog, (*Lymnodynastes tasmaniensis*), a close ally to the endangered green and golden bell frog (*Litoria raniformis*), bearded dragon (*Pogona barbatus*), lace monitor (*Varanus varius*), wood gecko (*Diplodactylus vittatus*) and mulga snake (*Pseudechis australis*).

Native animals which occur in the national park and/or the nature reserve and which are listed on Schedule 12 of the National Parks and Wildlife Act (Endangered Fauna) include the painted honeyeater (*Grantiella picta*), superb parrot (*Polytelis swainsonii*), turquoise parrot (*Neophema pulchella*), glossy black cockatoo (*Calyptorhynchus lathami*), chestnut quail-thrush (*Cinclosoma castanotum*), Gilberts whistler (*Pachycephala inornata*), shy hylacola (*Sericornis cautus*) and pink cockatoo (*Cacatua leadbeateri*). All but the superb parrot probably breed in the area.

The bird species listed as endangered occur throughout the park and reserve in woodland and scrub. Little is known about their habitat requirements although at this stage no particular management strategies appear necessary.

Introduced animals include rabbits (*Oryctolagus cuniculus*), goats (*Capra hircus*), pigs (*Sus scrofa*), foxes, cats and house mice (*Mus musculus*). Rabbits occur mainly on the valley grasslands and may be contributing to the lack of regeneration of native plants in these areas. Fox and cat control are important because of the vital function of the park and reserve as remnant habitat for the native animals of the district including several endangered species. Goats occupy the rocky escarpments and ridges as well as the flats. They have had a high impact on the area's vegetation but recent control programs have reduced numbers to low levels. Pigs occur in low numbers and are controlled when necessary. Pigs and goats re-invade from nearby areas.

Links with other natural areas are very important for maintaining the biodiversity of the park and reserve. Together with the adjacent Binya and Conapaira South state forests, the park and reserve are surrounded by largely cleared agricultural land. There are patchy links with other natural areas along the ranges to the north. The Service will encourage the maintenance and enhancement of these links.

Policies

- * The habitats of rare, vulnerable and threatened plant and animal species will be protected.
- * Regeneration of native vegetation on cleared valley floors, apart from picnic and camping areas, will be encouraged. Priority will be given to Woolshed Flat. Revegetation will be encouraged by the most appropriate means. A review of the most relevant information including techniques of revegetating semi-arid areas will be undertaken as part of the program developed to achieve this revegetation.
- * Introduced species will be controlled and where possible eradicated where they pose a threat to native communities and practical control methods are available or they are agricultural pests.
- * Pest control programs will be carried out in conjunction with adjoining landholders and the Rural Lands Protection Board.
- * Control programs will be designed and implemented in such a manner as to minimise the impact on non-target species and other values.
- * The Service will liaise with land use planning authorities to encourage protection of areas of natural vegetation in the district and, if possible, formation of continuous vegetated links between Cocoparra and other large areas of natural vegetation.

Actions

- * The distribution of bridal creeper will be determined. It will be treated and if possible eliminated.
- * Revegetation in the Woolshed Flat area will be encouraged by the most appropriate means. A review of the most relevant information including techniques of revegetating semi-arid areas will be undertaken as part of the program to be developed to achieve this revegetation.
- * An introduced species control plan will be prepared incorporating procedures for monitoring pest numbers and their effects, control techniques, priorities and programs.
- * Pending preparation of the introduced species control plan, pigs, and goats will continue to be controlled to keep them at very low numbers and control of cats, foxes and rabbits will be undertaken.

4.1.3 Fire Management

Fire is a natural feature of the environment of Cocoparra National Park and Cocoparra Nature Reserve. It is a major factor in determining the structure and species composition of the vegetation and has long term effects on animal populations. Fires generally occur during hot dry summer conditions following a wet winter and spring and are carried by extensive grass and herb growth.

The pre-European settlement fire regime is not known but large dead cypress pines and thick layers of charcoal exposed in creek gullies indicate that severe fires have occurred in the past. Extensive fires occurred on the Cocoparra Range in 1939 and 1981 and small fires occur every few years. It appears desirable that the woodland communities should not burn more often than at least every 20-40 years. Some areas should remain unburnt for as long as possible to add to habitat diversity. The fire pattern has resulted in a range of vegetation age groups.

The threat of wildfire is relatively low because of the nature of the vegetation communities on the range. The dominant tree species such as cypress pine, accumulate fuel slowly because of their slow growth rates. The often sparse ground cover also reduces the risk of fire. Fire risk is higher, however, in grassland on the cleared valley floors.

The fire response of the rare plant species in the park and reserve is unknown. Many rare plants are, however, fire sensitive.

Lightning strikes and arson are the most common causes of wildfire on the national park and nature reserve.

Prescribed burning is generally not appropriate. In order to achieve an effective burn it would have to be carried out during the hotter, drier months when risk of escape would be high. Additionally, because of the rapid regeneration of fire-carrying understorey, there would be a high risk of subsequent wildfire after a short interval. Slashing is undertaken around visitor facilities to reduce the risk of fire ignition in these areas.

The Mailmans Gap and Woolshed Flat management tracks, Mt Bingar Road and the Barry Scenic Drive allow division of the area into blocks for containment of fire. Management tracks run along the eastern edge of the national park and nature reserve and northern boundary of the nature reserve. Water for fire suppression is available from a number of tanks bordering the park and reserve.

The National Parks and Wildlife Service is a designated fire authority under the Bush Fires Act (1949). It is responsible for controlling fires on areas under its control and ensuring they do not cause damage to neighbouring properties. This responsibility includes the implementation of fuel management programs. The Service may also assist with the control and suppression of fires adjacent to its parks and reserves. An important part of the Service's fire management is participation as a member of local District Fire Committees in the preparation of district fire management plans under Section 41 of the Bush Fires Act. Cocoparra National Park and Cocoparra Nature Reserve are covered by Carathool Shire District Fire Committee.

Outside the national park and nature reserve, fire management is performed by the local bush fire brigades. The Service will continue to promote a cooperative approach to fire fighting with these organisations as essential for both the protection of property and of the natural resources and cultural heritage of the two areas. In particular, volunteer brigades from Griffith Shire have been important in bushfire fighting within the two areas in the past.

Policies

- * Fire will be managed in accordance with the Section 41A district fire management plan and the park and reserve fire management plan to be prepared. Fire management will ensure:
 - protection of human life and property;
 - conservation of those plant communities and plant or animal species which require a particular fire frequency;
 - maintenance of habitat diversity;
 - protection of Aboriginal sites, historic places and recreation facilities.
- * As much of the vegetation as possible will be maintained in as old an age class as possible, with the aim of ensuring that most areas are not burnt more often than at least every 20-40 years.
- * All wildfires will be suppressed and will be restricted as much as possible in extent.
- * Prescribed burning will not generally be undertaken. It may be used in limited areas where found by investigation to be needed to protect particular property or park features or for nature conservation.
- * Use of heavy machinery for fire suppression will be avoided as far as possible in the vicinity of rare plants, Aboriginal sites and historic places.
- * Areas disturbed by fire suppression operations will be rehabilitated as soon as practical after the fire.
- * Liaison will be maintained with volunteer fire brigades, fire officers and neighbours to ensure co-ordination in the suppression of wildfires in the park and reserve and on adjoining lands.
- * Records will be kept of all fire within the park and reserve, including extent, intensity and impact.

Action

- * A fire management plan will be prepared detailing fire management programs and strategies, rehabilitation procedures, co-operative arrangements and resources and neighbouring lands protection considerations. The draft plan will be placed on public exhibition.

4.2 CULTURAL HERITAGE

The cultural heritage is an important component of the environment and may have aesthetic, historic, scientific and social significance to present and future generations. Cultural heritage includes both Aboriginal and non-Aboriginal events and places.

4.2.1 Aboriginal Sites

The Cocoparra Range is part of the traditional lands of the Wiradjuri nation. Wiradjuri lands primarily embraced the catchments of the Lachlan and Murrumbidgee Rivers and the upper catchment of the Macquarie River. Some of the place names in the area are of Aboriginal origin; for example Binya means mountain and Cocoparra is allied to the Aboriginal 'cocopara' describing the kookaburra. During the latter part of the 19th century the Wiradjuri people were forcefully relocated to missions. They returned to the local area during the 1920s.

Cocoparra National Park and Cocoparra Nature Reserve are within the Threeways Local Aboriginal Land Council area of the Wiradjuri Regional Aboriginal Land Council.

Most evidence of Aboriginal occupation in the district has been found along the major rivers such as the Lachlan and Murrumbidgee and it was understood that the ranges were visited only to obtain stone for tools and perhaps to hunt in good seasons. Recently, however, the distribution and density of Aboriginal sites found on the Cocoparra Range during a survey by Smith (1989), suggested that intensive Aboriginal occupation of the range occurred during winter and spring when food resources became scarce along the rivers but when surface water continued to be available in the protected valleys of the range.

Nearly 60 Aboriginal sites have been found in the park and reserve and it is probable that many other sites exist. The sites are mainly open campsites but include some scarred trees. A similar density of sites has been found on both the ridges and alluvial flats but there are few sites on the slopes. The majority of sites are close to stream lines and those on the flats tend to be larger with a greater number and variety of artefacts. Some of these are located in picnic areas, along roads and walking tracks. They are fragile, difficult to protect and are easily damaged accidentally by visitors. Surface cover is maintained in these areas to minimise damage to the sites.

Sites on creek banks are also subject to stream erosion. Complete protection of these sites is not possible and authorised salvage of artefacts may be appropriate where destruction of the site by natural causes is inevitable.

Most of the tools are of silcrete or quartzite, plus some fine grained volcanic rock. No quarries have been found in the park or the reserve but it is possible that stone was obtained from conglomerate at scattered locations all over the range.

Carved trees occur in the district although none have been found in the park or reserve. Rock art is rare in the district. In this respect the cultural traditions of the Wiradjuri people appear to have been more similar to those of the highland Aborigines than the people of other parts of the western plains.

Policies

- * All Aboriginal sites will be protected as far as possible from disturbance or deterioration by human activities.
- * Sites threatened by natural causes will be identified as priority sites for detailed recording and research.
- * Local and regional Aboriginal land councils will be consulted about all aspects of management of Aboriginal sites and Aboriginal people will be encouraged to be involved in their management.
- * All works proposed for the park and reserve will be preceded by a survey for Aboriginal sites.

- * New walking tracks or other facilities will not be located within or close to Aboriginal sites unless protection measures for the site have been undertaken.
- * The location of Aboriginal sites will not be publicised except where:
 - an assessment of their significance has been undertaken and works implemented if necessary to protect the site or sites from damage; and
 - the site will be interpreted to promote public knowledge and appreciation of Aboriginal culture.

Action

- * All known Aboriginal sites will be recorded.

4.2.2 Historic Places

The first Europeans to visit the Cocoparra range were John Oxley and the members of his 1817 expedition exploring the Lachlan Country. They named the range Peels Range. Oxley approached the range from the east and climbed a hill which the party named Mount Caley after the botanist George Caley. The expedition also named Mt Brogden, under which it camped. Here a member of the party planted oak, quince, peach and apricot seeds on the King's birthday 'to serve to commemorate the day and situation, should these desolate plains be ever again visited by civilised man of which, however, I think there is little probability'. Oxley turned from a south-westerly route to a nor-westerly route around the southern end of the range.

It is believed that the area was later visited by Major Thomas Mitchell during his 1836 expedition along the Lachlan and Murray Rivers. Mitchell sent men into the range to shoot wild cattle for fresh meat, probably further north than the area which is now nature reserve. This indicates that there was some movement of pastoralists into the district in the intervening period.

The area was not systematically occupied, however, until the 1860s when development of water conservation techniques allowed settlement away from the major rivers. East of the range was Bynya station with an area of 169 000 acres, established by George Forsythe in the early 1860s. The property was subdivided in 1912 for use as wheat farms. Ballandry station was established west of the range and was also subdivided in the early 1900s.

Rough grazing was carried out on the range and more intensive agriculture was undertaken on the flat land at the foot of the range. Clearings and the remains of some structures such as fence lines attest to the former pastoral use of the park and reserve.

The western boundary of the park and reserve is contiguous with the Whitton Travelling Stock Route which incorporates an old road constructed using horse teams and metal scoops. This road was used as a main artery for Cobb & Co. coaches travelling between Melbourne and Queensland in the late 19th century. A staging post, houses, dance hall, race track and vegetable gardens were located at Shingled Hut Creek adjacent to the park. Most of the original route has been subject to road improvement but small sections of the original surface remain, including a bridge at Steamboat Creek, in the park. It is possible that other sections of the road or the sites of associated structures are located within the park

During the late 19th and early 20th centuries, copper ingots were brought by bullock wagon from mines at Cobar and Mt Hope along the stock route to the railway at Whitton to the south of the range.

Other historic places identified within the park and reserve include:

- the site and some remains of former buildings, ground tanks and a well at Woolshed Flat;
- holding yards and a dam at Washpool Creek;
- a bore, tank stand and shelter adjacent to the creek north of Five Mile Creek;
- a stone cairn and an army training site used during World Wars I and II on Mt Brogden;
- a trig station, site of a CSIRO weather station and remains of a space observatory on Mt Bingar; and
- recreation areas at Store Creek, Jacks Creek, Pleasant Valley and Spring Hill.

Very little is known of the history of these places and historical research and archaeological field survey are needed. More places of historic interest are likely to occur in the national park and nature reserve.

Policies

- * The historic structures and places within Cocoparra National Park and Cocoparra Nature Reserve will be conserved in compliance with the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance*, (the Burra Charter) and the Heritage Act, 1977.
- * Structures will be altered or removed only in accordance with a conservation assessment which examines their cultural significance, and will be recorded before undertaking any work.
- * All ground disturbance within the vicinity of historic places will be preceded by an archaeological survey.
- * Historic places close to recreation facilities and heavily visited areas will be interpreted so as to promote public understanding and appreciation of their history and cultural significance and to assist in site protection.

Actions

- * Historic places in the park and reserve will be progressively recorded and their significance assessed.
- * The section of the Whitton Stock Route within the park at Steamboat Creek will be maintained clear of vegetation and will be interpreted.

4.3 USE OF THE AREA

It is an important aspect of the management of this area to ensure that its use - whether by the general public, special interest groups, Service managers or other authorities - is appropriate, that is, in conformity with the National Parks and Wildlife Act and the objectives of this plan of management.

The major categories of use that can be appropriate, to varying degrees, on Service areas are:

- environmental education;
- promotion of the area, the work of the Service and the conservation of nature and of cultural heritage;
- recreation in a natural setting;
- research; and
- management operations, by the Service itself and other authorities with statutory responsibilities in the area.

The extent to which these categories of use will be provided for in Cocoparra National Park and Cocoparra Nature Reserve is indicated below.

4.3.1 Promotion and Interpretation

Cocoparra National Park has been a local recreation resource for a long time but a high proportion of users are unaware that it is a national park. This leads to problems of inappropriate activities such as use of trail bikes in the park.

Recreational use of the nature reserve is not encouraged and no facilities for this purpose are provided. Some unauthorised vehicle entry into the nature reserve occurs along the valley floors on its western side.

While overall visitor numbers are low, the visitor facilities in the national park are often full on weekends and during holidays with good weather. These facilities and immediately surrounding areas are suffering from trampling of vegetation and wood gathering, and in places soil erosion. The capacity of semi-arid environments to sustain moderate levels of visitor use is low because of the very dry climate and therefore slow growth rate of vegetation. The Service will therefore not seek to increase use of the area.

In addition to providing information on the features and facilities of Cocoparra National Park emphasis will be placed by the Service in its environmental education and interpretation programmes on promoting an appreciation and understanding of the fragile nature of the area and awareness of the importance of appropriate visitor use and behaviour to minimise disturbance to the natural features of the national park.

Information shelters are located at the Pines and Spring Hill picnic areas. Interpretive signs are located along the Mt Brogden and Jack's Creek walking tracks. Discovery Ranger walks are held during holiday periods.

School and youth groups regularly use the park for educational purposes, particularly the Spring Hill and Jack's Creek areas.

Policies

- * The awareness of visitors and the local community of the significance of Cocoparra National Park and Cocoparra Nature Reserve and the importance of appropriate visitor use and behaviour will be promoted.
- * Promotional and interpretive programs will include information and activities for the disabled and for ethnic groups.
- * The following themes will be emphasised in promoting and interpreting the park:
 - the geology of the Cocoparra Range, its large scale and its small scale features;
 - the remnant nature of the native plant and animal communities of the Cocoparra Range and their importance for conservation;
 - the arid climate, slow growth rates and vulnerability of the area to misuse;
 - Aboriginal use and European history of the area; and
 - opportunities for picnicking, walking and nature study in a variety of natural settings.

Actions

- * Signs will be erected to inform people that vehicle entry into the nature reserve is prohibited and to make visitors approaching from the north aware that recreation facilities are available in the national park.
- * An interpretive sign will be provided at the Woolshed Flat camping area with information about pastoral use of the area.

4.3.2 Recreation Opportunities

It is estimated that Cocoparra National Park attracts a few thousand visitors per year and numbers are slowly increasing. The majority of visitors to the park are locals and most visits are between April and November after rain sets the creeks running. Visitation is highest in spring when on good weekends up to 80 cars are present in the park.

Access to the western side of the park and reserve is via an unsealed road along the Whitton Stock Route from which access to visitor facilities within the park is gained by unsealed park roads. These park roads may become impassable during wet weather in which case they are closed to public use. Access to the southern end of the park is via the Barry Scenic Drive. There is no public vehicle access to the eastern side of the national park or nature reserve.

A camping area at Woolshed Flat provides for basic car camping. Up to 50 campers use the area on good weekends. Re-design and landscaping are needed to make the camping area more functional and attractive.

Bush camping is permitted throughout the park away from roads and facilities.

Picnic facilities in the park are low key consisting of road access, picnic tables, fireplaces, rubbish pits and pit toilets. Picnic areas are provided in the following localities:

- **Woolshed Creek Valley** at the Pines, Woolshed Flat and Ironbark;
- **Jacks Creek**;
- **Store Creek**;
- **McGregors Creek**; and
- **Spring Hill** near Falcon Falls along the Barry Scenic Drive.

The Forestry Commission provides a picnic area in Binya State Forest adjacent to the southern boundary of the park.

The McGregors Creek area is unsignposted, not marked on the park brochure, has poor access and is little used. It contains only barbecues and rubbish bins. Retention of this facility is unnecessary as there are several nearby picnic areas. Its removal would permit regeneration of the important valley floor vegetation. The area will continue to be available for walking and bush camping.

A vehicle track also provides access into the Homestead Creek valley. There are no recreation facilities at this locality, the site receives little use and there are several picnic areas nearby. Retention of this road for public vehicle access or management use is not necessary and it will be closed to allow revegetation of the valley floor.

There are several short walks in the park. Walking tracks are provided:

- to the summit of Mount Brogden from the Binya Forest picnic area;
- to Falcon Falls from the Spring Hill Picnic Area; and
- along Ladysmith Glen from the Jacks Creek Picnic Area.

Walkers also use the management track east of Woolshed Flat and informal walking tracks to Woolshed Falls and Eagle Falls and along Store Creek. These provide useful access to popular features and will be retained.

The tracks along Store Creek and to Woolshed Falls require some upgrading to prevent erosion. Construction of a loop track between Woolshed Falls, Eagle Falls and the picnic areas in Woolshed Flat would provide opportunities for longer walks and encourage appreciation and enjoyment of this area.

Horse riding occasionally occurs in the park. Horseriding is not appropriate because of the potential for erosion and weed introduction. Trails in the adjacent Binya State Forest are available for horse riding.

Abseiling is undertaken at Jacks Creek and some other areas. It is not permitted during the peregrine falcon nesting period between June and December.

Policies

- * The picnic areas at the Pines, Woolshed Flat, Jacks Creek, Store Creek, Ironbark and Spring Hill will be maintained
- * The camping area at Woolshed Flat will be maintained.
- * The existing walking tracks will be maintained.

- * Opportunities for medium distance walking will be created in the Woolshed Flat area.
- * Bush camping will be permitted within the park more than 500m from roads, picnic areas, the Woolshed Flat camping area and walking tracks.
- * The use of wood for camping and cooking fires will be discouraged. Visitors will be encouraged to use alternative fuels for camping and cooking purposes.
- * Access roads may be closed to public use during periods of wet weather. Signposting will direct visitors to alternative facilities.
- * Abseiling will not be permitted from 1st June to 1st January each year.
- * Horseriding will not be permitted in the park.

Actions

- * Visitors will be made aware through signs, brochures etc. of the impacts of firewood collection in the park and be encouraged to minimise firewood use or, preferably, bring fuel barbecues.
- * The number of barbecues will be progressively reduced at each picnic area primarily by removing the outlying barbecues.
- * The Woolshed Flat camping area will be re-designed and landscaped to make it more attractive and functional. If the toilets are to be relocated, consideration will be given to replacing them with composting toilets.
- * The Store Creek walking track will be re-routed and upgraded where necessary to prevent erosion.
- * The walking tracks to Woolshed Falls and Eagle Falls will be incorporated into a loop walk around the Woolshed Flat valley. Existing tracks will re-routed or upgraded where necessary.
- * The Homestead Creek track will be closed and allowed to revegetate.
- * Recreation facilities will be removed from the McGregors Creek picnic area.
- * The car parks at Store Creek and The Pines picnic area will be resurfaced.

4.3.3 Research

The purpose of scientific study in the national park and nature reserve system is to improve the understanding of its natural resources and cultural heritage and the processes which affect them. Research will also establish the requirements for the management of particular species. Data and findings from research studies and surveys will be utilised in park management.

Service policy is to encourage research into natural and cultural heritage by recognised authorities and individuals and the Service may provide assistance with access and information. However, where a research topic is directly applicable to particular management problems, the Service may also provide financial and logistic support.

The Service does not presently have the resources to undertake much of the long term research needed for the management of Cocoparra National Park and Cocoparra

Nature Reserve. To encourage the use of the two areas for *bona fide* research a prospectus will be prepared as the basis for the involvement of research organisations.

Policies

- * Cocoparra National Park and Cocoparra Nature Reserve will be available for appropriate research.
- * Research topics which improve knowledge of the resources of the area and assist management will be encouraged. In particular research will be encouraged into:
 - the distribution and management needs of rare, vulnerable and threatened plant and animal species in the park and reserve;
 - the effects of fire in woodland communities and the fire management needs of the area's plant and animal communities, particularly rare and endangered species;
 - past Aboriginal use of the area and the characteristics and distribution of Aboriginal sites; and
 - the history of European use of the area.
- * Only research which causes minimal disturbance to the values of the area will be permitted unless alternative opportunities are not available outside the area and the results of the research can be demonstrated to offer significant benefits for improvement of management programs or knowledge of natural and cultural resources.
- * Liaison will be maintained with researchers to obtain as much mutual information and assistance as possible. The results of research will be required to be provided to the managers of the area.
- * Park visitors will be encouraged to report sightings of native animals.

Action

- * A prospectus will be prepared as a guide to priority research objectives and circulated to tertiary institutions and appropriate organisations.

4.3.4 Management Operations

Because of the closeness of the town of Griffith no management facilities are located in the park or reserve apart from management tracks.

Old tracks along some of the valley floors in the nature reserve and park, apart from the Mailmans Gap and Woolshed Flat tracks, are not needed for management purposes and will be allowed to revegetate.

The summit of Mt Bingar is excluded from the park and contains a television and radio transmitter. A satellite ground station managed by the Commonwealth Government is located adjacent to the television transmitter and lies partly in the park.

There are several ground tanks and dams in the park and reserve. Only a few are in a condition to effectively hold water and they do so for only short periods. Native animals are adapted to natural conditions and do not need the storages. They are not needed

as water sources during fire suppression because of the number of alternative sources close by. As their maintenance would be likely to increase populations of feral goats and pigs, dams and tanks will not be maintained.

The Whitton Stock Route was disestablished in 1988. Addition of those parts of the stock route which lie adjacent to the park and reserve would assist in the management of the two areas and protect important natural values and cultural features. It is therefore proposed to seek the addition of adjacent parts of the stock route to the park and reserve.

Policies

- * Management tracks shown on the maps, centre pages, will be maintained to a satisfactory standard of access, safety and stability.
- * Vehicle tracks not needed for management purposes will be closed in order to encourage their revegetation.
- * Tanks and dams will not be maintained.

Action

- * The Service will continue to negotiate with the Department of Land and Water Conservation and with Carathool Shire Council to have those parts of the Whitton Stock Route reserve which lie adjacent to the national park and nature reserve added to the two areas.

5. PLAN IMPLEMENTATION

This plan of management is part of a system of management developed by the National Parks and Wildlife Service. The system includes the National Parks and Wildlife Act, management policies, established conservation and recreation philosophies and strategic planning at corporate, regional and district levels.

The implementation of this plan will be undertaken within the annual programmes of the Service's Griffith District. 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 special requirements of the Director-General or Minister.

District programmes are subject to ongoing review, within which, works and other activities carried out at Cocoparra National Park and Cocoparra Nature Reserve are evaluated in relation to the 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.

Under Section 81 of the National Parks and Wildlife Act this plan shall be carried out and given effect to and no operations shall be undertaken in relation to Cocoparra National Park and Cocoparra Nature Reserve unless the operations are in accordance with this plan. If, however, 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 implementation of this plan, relative priorities for identified activities are summarised below:

Activity	Plan ref
High Priority	
* Undertake erosion control on management tracks	4.1.1
* Survey and control bridal creeper	4.1.2
* Prepare introduced species control plan	4.1.2
* Control pigs, goats, foxes, cats, rabbits pending plan	4.1.2
* Promote minimal use of firewood through signs, brochures	4.3.1
Medium Priority	
* Prepare fire management plan	4.1.3
* Undertake vegetation regeneration at Woolshed Flat	4.1.2
* Record and assess cultural sites	4.2.1,4.2.2
* Maintain and interpret stock route at Steamboat Creek	4.2.2
* Erect signs prohibiting vehicle entry into the nature reserve and provide information about alternative facilities in the national park	4.3.1
* Re-design Woolshed Flat camping area	4.3.2

- * Reduce barbecue numbers at picnic areas 4.3.2
- * Close Homestead Creek track 4.3.2
- * Remove facilities from McGregors Creek area 4.3.2
- * Resurface Store Creek and Pines car parks 4.3.2
- * Prepare and circulate research prospectus 4.3.3
- * Negotiate addition of Whitton Stock Route reserve 4.3.4
- * Map areas of accelerated soil erosion 4.1.1

Low Priority

- * Erect interpretive sign at camping area 4.3.1
- * Upgrade Store Creek walking track 4.3.2
- * Create loop walk around Woolshed Flat 4.3.2

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