

**BIRIWAL BULGA NATIONAL PARK AND
WEELAH NATURE RESERVE
PLAN OF MANAGEMENT**

NSW National Parks and Wildlife Service

Part of the Department of Environment and Conservation (NSW)

May 2004

This plan of management was adopted by the Minister for the Environment on 17 May 2004.

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Cover photograph of Mount Rockaree by Donna Eccelles.

FURTHER INQUIRIES

For additional information or inquiries on any aspect of the plan, contact the National Parks and Wildlife Service Mid North Coast Regional office at 152 Horton St, Port Macquarie or by phone on (02) 6586 8300.

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FOREWORD

Biriwal Bulga National Park and Weelah Nature Reserve are located on the northern edge of the Bulga plateau, approximately 45km north west of Taree and 60km west of Port Macquarie.

Biriwal Bulga National Park was gazetted in 1999 as part of the North East Regional Forest Agreement and covers an area of 5,813 hectares. It was formally part of Bulga State Forest and Frenchs Creek Flora Reserve. Weelah Nature Reserve covers an area of 37 hectares and was gazetted in 1971, over land donated to the NPWS by Mr George Coleman for the preservation of rainforest.

The planning area is dominated by dry sclerophyll forests, but includes large stands of wet sclerophyll forest and rainforest. Sixteen forest ecosystems have been mapped within the planning area, with extensive areas of old growth forest. The large size, diverse and relatively undisturbed vegetation communities of the planning area provide habitat for a wide range of fauna species. Seventy-four fauna species have been recorded in the planning area, including nine threatened species.

The planning area is significant to the local Aboriginal people. Nine Aboriginal sites have been identified in the planning area and a further two potential cultural sites require investigation.

The *National Parks and Wildlife Act 1974*, requires that a plan of management be prepared for each nature reserve. A plan of management is a legal document that outlines how the area will be managed in the years ahead.

A draft plan of management for Biriwal Bulga National Park and Weelah Nature Reserve was placed on public exhibition from 11 October 2002 until 3 February 2003. The exhibition of the plan of management attracted 7 submissions that raised 6 issues. All submissions received were carefully considered before adopting this plan of management.

This plan of management establishes the scheme of operations for Biriwal Bulga National Park and Weelah Nature Reserve. In accordance with sections 75 and 76 of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

BOB DEBUS

MINISTER FOR THE ENVIRONMENT

1 NATIONAL PARKS AND NATURE RESERVES IN NEW SOUTH WALES

1.1 LEGISLATIVE AND POLICY FRAMEWORK

The management of national parks and nature reserves in NSW is in the context of the legislative and policy framework, primarily the *National Parks and Wildlife Act 1974* (NPW Act), the *Threatened Species Conservation Act 1995* (TSC Act), the NPW Regulations and the policies of the National Parks and Wildlife Service (NPWS). The policies arise from the legislative background and internationally accepted principles of park management. They relate to nature conservation, Aboriginal and historic heritage conservation, recreation, commercial use, research and communication. Other legislation, international agreements and charters may also apply to management of the area. In particular, the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act) requires the assessment and mitigation of environmental impacts of any works proposed in this plan.

The planning area includes 'Ministerial roads', which are those roads that do not form part of the gazetted park and are vested in the Minister for the Environment on behalf of the Crown for the purposes of Part 11 of the NPW Act. Ministerial roads were created under section 13 of the *Forestry and National Parks Estate Act 1998* to ensure the continuation of access arrangements that existed immediately before the park's creation. This primarily relates to use of these roads for timber hauling and private property access. Whilst Ministerial roads do not form part of the gazetted park area, the management of these roads is subject to the provisions of this plan, the NPW Regulations and the requirements of the EP&A Act.

1.2 MANAGEMENT PRINCIPLES

National parks are reserved under the NPW Act to protect and conserve areas containing outstanding or representative ecosystems, natural or cultural features or landscapes or phenomena that provide opportunities for public appreciation and inspiration and sustainable visitor use.

Under the Act, national parks are managed to:

- conserve biodiversity, maintain ecosystem functions, protect geological and geomorphological features and natural phenomena and maintain natural landscapes;
- conserve places, objects, features and landscapes of cultural value;
- protect the ecological integrity of one or more ecosystems for present and future generations;
- promote public appreciation and understanding of the park's natural and cultural values;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of natural and cultural values;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of natural and cultural values; and
- provide for appropriate research and monitoring.

Nature reserves are reserved under the NPW Act to protect and conserve areas containing outstanding, unique or representative ecosystems, species, communities or natural phenomena.

Under the Act, nature reserves are managed to:

- conserve biodiversity, maintain ecosystem functions, and protect geological and geomorphological features and natural phenomena;
- conserve places, objects, features and landscapes of cultural value;
- promote public appreciation, enjoyment and understanding of the reserve's natural and cultural values; and
- provide for appropriate research and monitoring.

Nature reserves differ from national parks in that they do not have as a management principle to provide for visitor use.

1.3 SPECIFIC MANAGEMENT OBJECTIVES

Future management of Biriwal Bulga National Park and Weelah Nature Reserve will focus on the following specific objectives:

- conserve the diverse native fauna of the park, including threatened animal species;
- protect and manage Aboriginal objects in consultation with the local Aboriginal people;
- protect and maintain the diverse and relatively undisturbed vegetation communities;
- visitor facilities in nearby reserves will be maintained rather than developed in the planning area;
- ensure the pine plantation is contained and eventually eradicated and the site rehabilitated in the long term; and
- control and where possible eliminate pest species in the planning area, in consultation with relevant authorities and neighbouring landholders.

2 BIRIWAL BULGA NATIONAL PARK AND WEELAH NATURE RESERVE

2.1 LOCATION, GAZETTAL AND REGIONAL SETTING

Biriwal Bulga National Park and Weelah Nature Reserve (herein referred to as the 'planning area') are adjoining areas on the northern edge of the Bulga plateau located approximately 45km north west of Taree and 60km west of Port Macquarie. These areas are covered under one plan of management as they adjoin and have similar values and management issues.

Biriwal Bulga National Park covers an area of 5813ha (see map). The park was formally part of Bulga State Forest. The park was originally gazetted on 1 January 1999 under the Forest and National Park Estate Act 1998 as part of the North East Regional Forest Agreement and covered an area of 4409ha. In January 2003 a further 1404ha of Bulga State Forest, including Frenchs Creek Flora Reserve was gazetted as an addition to the park. The name Biriwal Bulga is believed to be Aboriginal for 'Big Mountain'.

Weelah Nature Reserve covers an area of 37ha and was gazetted on 15 October 1971, having been donated to the NPWS by Mr George Coleman for the preservation of rainforest. The reserve is located approximately 8 km north of the village of Elands. The name Weelah is thought to be an Aboriginal word for the Australian brush-turkey (*Alectura lathamii*).

The planning area adjoins separate parts of Bulga State Forest and rural freehold land used for timber harvesting, cattle grazing and dairy farming. The nearest towns to the planning area are the small communities of Elands and Comboyne to the south and Ellenborough to the north.

The planning area is within both the Hastings and Greater Taree City Council (GTCC) Local Government Areas.

2.2 LANDSCAPE CONTEXT

Natural and cultural heritage and on-going use are strongly inter-related and together form the landscape of an area. Much of the Australian environment has been influenced by past Aboriginal and non-Aboriginal land use practices, and the activities of modern day Australians continue to influence bushland through recreational use, cultural practices, the presence of pest plants and animals and in some cases air and water pollution.

The geology, landform, climate and plant and animal communities of the area, plus its location, have determined how it has been used by humans. The reserves past history of timber harvesting and forestry operations have had a major impact on the reserve.

Both Aboriginal and non-Aboriginal people place cultural values on natural areas, including aesthetic, social, spiritual, recreational and other values. Cultural values may be attached to the landscape as a whole or to individual components, for example to plant and animal species used by Aboriginal people. This plan of management aims to conserve both natural and cultural values. For reasons of clarity and document usefulness natural and

cultural heritage, non-human threats and on-going use are dealt with individually, but their inter-relationships are recognised.

2.3 NATURAL AND CULTURAL HERITAGE

2.3.1 Landform, Geology and Soils

The planning area is located on the northern edge of the Bulga Plateau and ranges in elevation from 130m to 670m on the plateau. The planning area provides good examples of escarpment terrain and spectacular views particularly from sections of Yarras Mountain Trail. The very prominent peak of Mount Rockaree lies south of the Yarras Mountain Trail.

The landform is dissected foothills with escarpments and gorge areas on the edge of the plateau. The dominant rock types in the area are mudstone, shale, sandstone and their metamorphic derivatives such as schist, phyllite, greywacke and slate. There are also some volcanic rock types including basalt found near the northern and southwest boundaries of Biriwal Bulga National Park (Truyard Pty Ltd 1992).

The planning area's soils vary in depth depending on slope. Most of the soils are skeletal although deeper soils occur on some plateaus and creek flood plains (Truyard Pty Ltd 1992). The steep slopes of the planning area and high annual rainfall make the soils in the area prone to erosion when vegetation cover is reduced.

2.3.2 Catchment Values

The planning area receives a mean annual rainfall of 1300-1600mm. Biriwal Bulga National Park drains through a series of perennial and ephemeral creeks into Doyles River, which joins the Ellenborough River and thence the Hastings River. The planning area contains the entire catchment of Green Gully Creek and a large portion of Big Creek. The park borders 6km of Doyles River, with a further 4km wholly within the park. Weelah Nature Reserve drains into Myall Creek, which is a tributary of the Ellenborough River.

The size of the planning area makes it a considerable contributor to catchment values and water quality. The water leaving the planning area supplies domestic stock on many downstream farms and is part of the supply for the major towns of Port Macquarie and Wauchope.

2.3.3 Native Plants

The planning area is dominated by dry sclerophyll forests, but includes large stands of wet sclerophyll forest and rainforest. Sixteen forest ecosystems have been mapped within the planning area, with the most extensive being old growth escarpment tallowwood (*Eucalyptus microcorys*)/bloodwood (*Corymbia gummifera*) and old growth dry red gum (*Eucalyptus tereticornis*)/bloodwood/apple (*Angophora subvelutina*). Weelah Nature Reserve contains one of the few rainforest remnants on the Bulga Plateau.

Due to the steep terrain in Biriwal Bulga National Park, past logging activities were restricted to the plateau areas in the southwest corner and on flatter sections along Yarras Mountain Trail. Although selective logging has occurred across most of the park, over 3500ha of the park contains relatively intact forest that has not been logged since the 1950s.

The relatively undisturbed and large area of intact rainforest in the planning area has been identified for future assessment as a potential addition to the Central Eastern Rainforest Reserves of Australia (CERRA) World Heritage Area (NPWS, 2001). It would complement other potential and listed parts of the CERRA World Heritage Area in the region such as Cottan-Bimbang National Park, Werrikimbee National Park and Mount Seaview Nature Reserve. Management of the planning area as outlined in this plan of management is consistent with the principles of the World Heritage Convention.

The species *Plectranthus suaveolens* is recorded in the planning area, and is listed as rare under ROTAP (Rare or Threatened Australian Plants) (Briggs and Leigh, 1996). There are no recorded threatened plants, as listed under the TSC Act recorded in the planning area. ROTAP is an important reference list for the national status of threatened species, particularly rare and poorly known species, which are not formally recognised under protected species legislation such as the TSC Act.

Table 1 lists significant plants species predicted to occur within or near the planning area, as developed by models during the Comprehensive Regional Assessment (CRA) for the Regional Forestry Agreement.

Table 1. Significant plants predicted to occur within and near the planning area

Scientific Name	Common Name	Status
<i>Cynanchum elegans</i>	vine	Endangered*
<i>Parsonsia dorrigoensis</i>	milky silkpod	Vulnerable
<i>Sarcochilus fitzgeraldii</i>	ravine orchid	Vulnerable
<i>Schistotylus purpuratus</i>		Regionally significant **
<i>Diuris flavescens</i>	ground orchid	Endangered **

* also listed under the Commonwealth's *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*

** located near the planning area

2.3.4 Native Animals

The large size, diverse and relatively undisturbed vegetation communities of the planning area provide habitat for a wide range of fauna species. Seventy-four fauna species have been recorded in the planning area, including nine species listed under the TSC Act as vulnerable (refer to Table 2).

Table 2. Threatened animal species found in the planning area.

Scientific Name	Common Name	Status
Birds		
<i>Ninox strenua</i>	powerful owl	Vulnerable
<i>Calyptorhynchus lathami</i>	glossy black cockatoo	Vulnerable
<i>Ptilinopus magnificus</i>	wompoo fruit-dove	Vulnerable
Mammals		
<i>Dasyurus maculatus</i>	spotted-tailed quoll	Vulnerable*
<i>Phascogale tapoatafa</i>	brush-tailed phascogale	Vulnerable
<i>Petaurus australis</i>	yellow-bellied glider	Vulnerable
<i>Phascolarctos cinereus</i>	koala	Vulnerable
<i>Potorous tridactylus</i>	long-nosed potoroo	Vulnerable
<i>Miniopterus schreibersii</i>	large bent-wing bat	Vulnerable

* also listed under the Commonwealths *EPBC Act*

Many of the fauna species recorded in the planning area, including several threatened species, such as the spotted-tailed quoll, powerful owl, yellow-bellied glider and wompoo

fruit-dove, are nomadic or depend on large home ranges that extend beyond the planning area. The planning area is part of an extensive corridor of high quality habitat in the upper Hastings Valley and the Comboyne plateau that extends to the coast through a series of national parks, state forests and private lands. Within this ecological corridor, the planning area is an important component of the regional mosaic of vegetation types, providing for the migration of fauna species between different populations and feeding grounds.

Table 3 lists the threatened species that may occur in or near the planning area as predicted by models developed for the CRA.

Table 3. Threatened animal species predicted to occur in or near the planning area.

Scientific Name	Common Name	Status
Birds		
<i>Tyto novaehollandiae</i>	masked owl	Vulnerable
<i>Atrichornis rufescens</i>	rufous scrub-bird	Vulnerable
<i>Tyto tenebricosa</i>	sooty owl	Vulnerable
Mammals		
<i>Macropus parma</i>	parma wallaby	Vulnerable **
<i>Petaurus norfolcensis</i>	squirrel glider	Vulnerable
<i>Miniopterus australis</i>	little bent-wing bat	Vulnerable
<i>Falsistrellus tasmaniensis</i>	eastern false pipistrelle	Vulnerable

Table 3. Threatened animal species predicted to occur in or near the planning area. (continued)

Scientific Name	Common Name	Status
Reptiles		
<i>Hoplocephalus bitorquatus</i>	pale-headed snake	Vulnerable
<i>Hoplocephalus stephensii</i>	Stephen's banded snake	Vulnerable
Frogs		
<i>Mixophyes iteratus</i>	giant barred frog	Endangered *
<i>Litoria subglandulosa</i>	glandular frog	Vulnerable
<i>Mixophyes balbus</i>	stuttering frog	Vulnerable *

* also listed under the Commonwealths *EPBC Act*

** predicted near the planning area

The area also preserves old growth forest which is important for fauna, such as the large forest owls, yellow-bellied gliders and spotted-tailed quolls, which rely on these old hollow bearing trees and fallen timber for shelter. The diversity of flora in the area is important for species such as the wompoo fruit-dove and yellow-bellied glider (NPWS, 2002b), which rely on a range of plants flowering and fruiting year round to provide food resources.

The high water quality in creeks flowing through the planning area together with its intact riverine vegetation provide for good habitat for threatened frog species, particularly the two *Mixophyes* species potentially found in the reserve (Table 3).

Biriwal Bulga National Park contains a large area of relatively undisturbed forest with core areas being several kilometres from the park boundary (NPWS 2002a). This area, combined with neighbouring state forest, has been identified as a high quality dingo conservation area.

2.3.5 Aboriginal Heritage

Aboriginal communities have an association and connection to the land. The land and water biodiversity values within a whole landscape context are the centre of Aboriginal spirituality and contribute to Aboriginal peoples identity. Aboriginal communities associate natural resources with the use and enjoyment of valued foods and medicines, caring for

the land, passing on cultural knowledge and strengthening social bonds. Aboriginal heritage and nature are inseparable from each other and need to be managed in an integrated manner across the landscape.

The Biripi Aboriginal people are associated with the Manning valley, which includes the planning area. It is estimated that between 800 to 1000 people of the Biripi nation traditionally inhabited the Manning valley (Truyard Pty Ltd, 1992). These people were dispersed throughout the valley in smaller dialectic clan groups such as the “Winmurra” (hill country) people and each clan group had specific boundaries. John Oxley’s observations and recent survey work by Collins and Morwood (1991) show that the escarpment and foothill country was occupied by Aboriginals well before European settlement of the area. There is also evidence to suggest that there were trade routes through the tableland and coastal tribes (Collins and Morwood, 1991). The area provided resources such as rock quarries, shelter areas on the creeks and a pathway between seasonal hunting areas for the Aboriginal people (Truyard Pty Ltd, 1992).

Five open campsites, three stone artefact scatters and one isolated stone artefact have been recorded in the planning area (Packard 1992, Tuyard Pty Ltd, 1992). A scarred tree and two rock cairns (a mound of stones piled up as a memorial or landmark) have been identified but require further investigation to determine whether they are of Aboriginal origin (Truyard Pty Ltd, 1992).

The planning area lies within the area of the Biripi and Purfleet-Taree Local Aboriginal Land Council (LALC) to the south, and Birpai and Bunyah LALC to the north.

2.3.6 History Since European Occupation

Exploration of the Doyles River area occurred in the early 1800s, although initial settlement in the Manning was on the lowlands adjoining the main river systems (Truyard Pty Ltd 1992). The Bulga Plateau was one of the last areas in the region to be settled with settlers arriving in 1892. In 1910, the value of timber was assessed and a road was constructed from Bobin to the Bulga Plateau.

Biriwal Bulga National Park was previously part of the Bulga State Forest Area and was contained within the Wingham and Wauchope Forestry Management Areas. These management areas have a long history of timber harvesting and logging operations. From the early 1900s, timber harvesting commenced throughout the region. The park contains examples of past logging practices such as different harvesting techniques, road construction and a trial pine plantation (refer to 2.3.2, Pine Plantation). Intermittent harvesting continued in the Yarras Mountain Trail area up until 1996.

In June 1990, the State government placed a moratorium on further harvesting in the most sensitive old growth stands in 14 management areas (which included Wingham Forestry Management Area) and required the Forestry Commission to prepare environmental impact statements (EISs) for each of these management areas (Truyard Pty Ltd, 1992). The EIS for the Wingham Management Area was to be the first prepared in the State as a result of this decision.

The outcomes of the EIS, and the CRA process that followed, resulted in a large portion of what was previously the Bulga State Forest areas to be conserved as Biriwal Bulga National Park.

In 1971, Weelah Nature Reserve was one of the first areas of private land in NSW to be donated as a conservation reserve to the NPWS. It is likely, that very limited logging operations occurred in Weelah Nature Reserve and the reserve provides a good example of relatively undisturbed rainforest and sclerophyll forest. The reserve is currently listed on the Register of the National Estate for its floristic and conservation values.

In the northern section of the planning area, along Yarras Mountain Trail there are the remains of a burnt hut, which may have historical value.

2.4 RECREATION AND VISITOR USE

The planning area has limited recreational use due to the remote location and lack of two wheel drive access roads. The main access roads to the planning area are from the south along Wingham Rd at Elands to Doyles River Rd and Sandy Knob Rd and from the northwest off the Old Highway to Yarras Mountain Trail. The planning area is also accessible from Blue Knob Rd in the southwest. The Doyles River runs roughly east west through the middle of the planning area and there is no through trail linking the north and south of the planning area. Access from the north off Oxley Highway to Costigans Rd and Yarras Mountain Trail is accessible by four wheel drive only. Costigans Rd is poorly signposted and crosses through a number of private property gates. Visitors to the planning area are encouraged to use the other main access roads.

Recreational opportunities in the planning area include bush walking, picnicking, car touring and remote camping. There are no facilities or walking tracks in the planning area and visitors are encouraged to be self-reliant.

Mount Rockaree is a significant landscape feature of the park and there is a walk along a management trail to the base of the mountain. Horse riders occasionally use some of the roads and the management trails in the south-west of Biriwal Bulga National Park. The surrounding area provides opportunities for car touring including four wheel driving. Scenic roads include the Old Highway and Doyles River Rd along the Bulga Plateau.

Recreational facilities available in the surrounding area include day use areas and walking tracks in Tapin Tops National Park and at Ellenborough Falls at Elands. Camping facilities are available in Tapin Tops National Park and at Maxwells Flat in Cottan-Bimbang National Park.

Weelah Nature Reserve has unique opportunities for interpretation as it contains one of the few rainforest remnants on the Bulga Plateau and was one of the first reserves donated to NPWS.

2.5 RESEARCH

Research was one of the main purposes for the donation and gazettal of Weelah Nature Reserve in 1971 (NPWS, 1976). In the late 1970s, a comprehensive flora and fauna survey was undertaken by NPWS in the different forest ecosystems in Weelah Nature Reserve. The reserve provides an important reference site for comparative studies with adjoining rural land and state forest and the nearby Boorganna Nature Reserve.

State Forests of NSW (SFNSW) undertook flora and fauna surveys in Biriwal Bulga National Park during 1991 as part of the State Forests Wingham Management Area EIS. Further flora and fauna survey work was undertaken as part of the North East Forest

Biodiversity Survey (NEFBS) and the CRA conducted between 1995-1999 which involved several sites in the southern section of the park.

Biriwal Bulga National Park provides research opportunities relating to post-logging forest recovery and comparative biodiversity studies between un-logged and logged areas. The park also has relatively low levels of pest species.

2.6 THREATS AND ISSUES

2.6.1 Pest Species

Pest plants pose a potential threat to diversity of vegetation in the planning area and can modify habitat for native fauna, displace flora and in some cases affect fire regimes by modifying fuel levels and vegetative structure. Pest plants are not widely distributed in the planning area due to a limited history of disturbance. A number of pest plants have invaded the logged ridges running off Yarras Mountain Trail. The species of major concern is lantana (*Lantana camara*) which has the ability to invade native bushland. Another 19 pest plants have been identified in disturbed areas of the reserve and surrounding area (Forestry Commission of NSW, 1990).

There are a number of pest animal species recorded in the planning area. Wild dogs (*Canis familiaris*), foxes (*Vulpes vulpes*), pigs (*Sus scrofa*) and cats (*Felis catus*) are of main concern. Fox and feral cat predation are currently listed as a threatening process under the TSC Act and the Commonwealth's EPBC Act.

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 as pest animals 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 wild dog management areas. This includes both Biriwal Bulga National Park and Weelah Nature Reserve. The RLP Act requires public land managers, such as the NPWS, to assist in the preparation of a wild dog management plan for wild dog management areas. These plans are to identify methods for the control of wild dogs and conservation of dingoes in these areas and are to be approved by the local Rural Lands Protection Board (RLPB).

Wild dogs are a threat to livestock on neighbouring properties. A wild dog-baiting program is currently conducted in conjunction with local landowners through the Gloucester RLPB and SFNSW. To date, baiting has been carried out along selected trails in Biriwal Bulga and Cottan-Bimbang National Parks and in the neighbouring Bulga and Doyles River State Forests.

2.6.2 Pine Plantation

A pine plantation of approximately 6ha is located in the southern section of Biriwal Bulga National Park off Grey Gum Forest Road. This plot was established in 1968-69 as a trial for future pine plantation programs on the plateau and escarpment forests.

Native vegetation is regenerating in the plantation. Pine trees are beginning to disperse in surrounding areas of native forest and will become a problem if they are left uncontrolled.

2.6.3 Fire

Fire has the potential to have a major impact on the biodiversity of the planning area. In particular, fire poses a potential threat to rainforest and wet sclerophyll communities during extreme fire weather. Fire can destroy rainforest and threatens the biodiversity and structure of wet sclerophyll forest if it occurs more frequently than once every 50 years (Bradstock *et al*, 1995). Since these two wet vegetation types cover large areas in the planning area, it is important to exclude or minimise fire in the area.

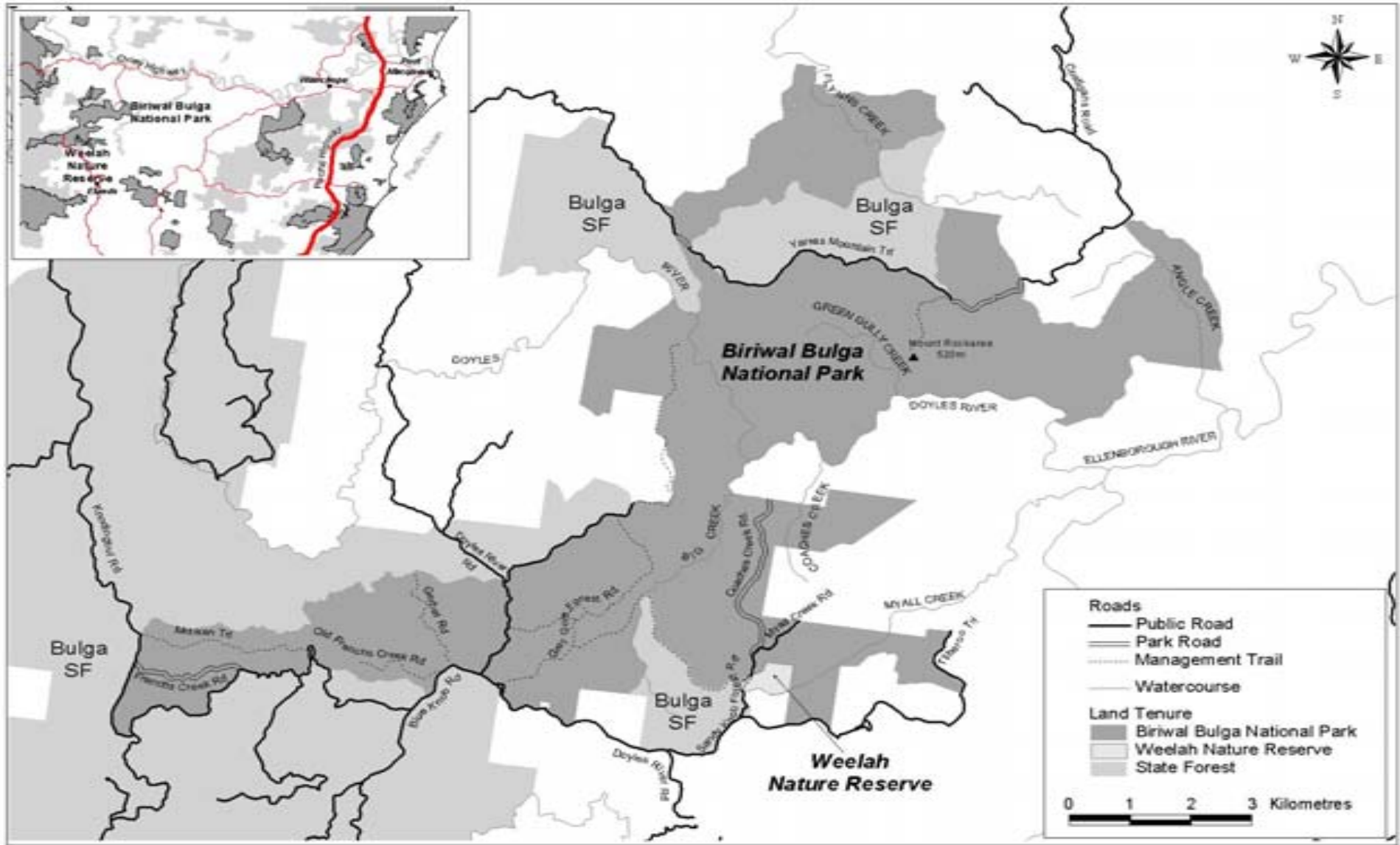
The fire history of the reserve has been poorly recorded and many fires that have occurred in the planning area have not been mapped. Anecdotal evidence indicates that the fire regimes for much of the planning area have probably exceeded fire frequency thresholds to maximise biodiversity. Areas near park boundaries are more likely to be frequently burned. Any further fire in these areas will exceed the appropriate fire frequency for the forest types (Bradstock *et al*, 1995).

2.7 MANAGEMENT OPERATIONS

The planning area contains seven Ministerial roads which are located along sections of Yarras Mountain and Milliken Trails, Sandy Knob Forest, Coaches Creek, Gerber, Frenchs Creek and Old Frenchs Creek Roads. These roads were vested in the Minister for the Environment to ensure the continuation of access arrangements, which existed immediately before the park's creation. This primarily relates to use of these roads for timber hauling and private property access. Whilst Ministerial roads do not form part of the gazetted park area, the management of these roads is subject to the provisions of this plan, the NPW Regulations and the requirements of the (EPA Act).

In addition to the Ministerial roads, there are a number of minor trails and snigging tracks remaining from former forestry use. Most of these tracks are not necessary for management and may cause erosion and siltation, the dispersal of pest plants, and provide vehicle access for inappropriate visitor activities. Management trails are for use by authorised vehicles only.

3 PLANNING AREA MAP



4 MANAGEMENT ISSUES AND STRATEGIES

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Soil and hydrology</p> <p>The park occupies the upper catchments of several creeks that provide potential habitat for threatened frog species and supply water to downstream neighbours. Erosion and subsequent siltation of the creeks can occur after wildfire and erosion on management trails is an ongoing maintenance issue.</p>	<ul style="list-style-type: none"> • Water quality is maintained and erosion minimised. 	<ul style="list-style-type: none"> • Implement erosion and sediment control as part of relevant management activities. • Work with the Catchment Management Boards to improve the integrity of riparian vegetation and water quality in the catchment. 	<p>High</p> <p>High</p>
<p>Native plants and animals</p> <p>The planning area contains high quality dry sclerophyll and rainforest habitat that supports a wide range of flora and fauna including nine threatened species.</p> <p>The NPWS is required to prepare recovery plans for all listed threatened species, some of which are currently in preparation.</p> <p>Long term conservation of the planning area's natural values would be enhanced by the retention of remaining vegetation on neighbouring lands.</p> <p>Biriwal Bulga National Park has been identified as a potential addition to the Central Eastern Rainforest Reserves of Australia (CERRA) World Heritage Area.</p>	<ul style="list-style-type: none"> • The diversity of flora and fauna in the planning area is maintained. • An improved understanding and documentation of the planning area's biodiversity. • The planning area boundary is consolidated to include other areas important to its management. 	<ul style="list-style-type: none"> • Maintain the habitat values and diversity of the vegetation communities through appropriate management of fire, pest species and access (refer to <i>Fire Management, Pest Species, Recreation and visitor use and Management Operations</i>). • Undertake flora and fauna surveys in the planning area. • Implement recovery plans for threatened species when they are prepared. • Work with relevant neighbours, conservation groups and others to encourage conservation of remaining vegetation in the vicinity of the reserve and to identify potential wildlife/habitat corridors to link to other native vegetation areas. • Assess the planning area as part of any future nomination of additions to the CERRA World Heritage Area. 	<p>High</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Low</p>

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Recreation and visitor use</p> <p>There is very little visitor use of the planning area due to its remote location and limited access.</p> <p>Recreational opportunities include remote bush walking and camping.</p> <p>The main access roads are from Doyles River Rd and Wingham Rd in the south, Blue Knob Rd in the southwest and the Old Highway from the northwest. The Doyles River separates the planning area and there is no through road linking the northern and southern region of the planning area.</p> <p>There are no facilities in the planning area and visitors are encouraged to be self reliant.</p> <p>Day use facilities and walking tracks are available in Tapin Tops National Park and at Ellenborough Falls. Camping facilities are available in Tapin Tops National Park and at Maxwells Flat in Cottan-Bimbang National Park. There is a management trail and walk that lead to the base of Mount Rockaree.</p> <p>Weelah Nature Reserve has a unique opportunity for interpretation, as it was one of the first donations of private land to the NPWS. The reserve represents one of the few remaining rainforest remnants on the Bulga Plateau.</p> <p>A low level of horse riding by the community occurs in Biriwal Bulga National Park.</p>	<ul style="list-style-type: none"> • Visitation is maintained at low levels and has minimal impact. • Visitors are informed of park values and management programs. • No new facilities are developed in the planning area and visitors are encouraged to use recreational facilities in the surrounding locality. 	<ul style="list-style-type: none"> • The planning area will be promoted as a remote location where visitors can experience solitude in a natural setting and are encouraged to be self reliant. • Visitor facilities will not be developed and adventure and commercial activities will not be permitted in the planning area. • Visitors will be encouraged to use recreational facilities in the surrounding area including Tapin Tops National Park, Cottan-Bimbang National Park and Ellenborough Falls. • Public vehicle access will be restricted to park and public roads shown on the map. Park roads will generally be maintained to a dry weather two-wheel drive standard. • Encourage opportunities for joint interpretation displays for the promotion of the planning area and surrounding recreational areas with GTCC. • Monitor recreation use and damage to vegetation and rock features at Mt Rockaree. • NPWS will promote Weelah Nature Reserve as one of the few remaining rainforest remnants on the Bulga Plateau and will provide interpretation material on the donation of the land by Mr George Coleman. • Horse riding will be permitted on park and public roads and on Grey Gum Forest Road in Biriwal Bulga National Park. Horse riding is not permitted in Weelah Nature Reserve in accordance with NPWS policy. 	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Medium</p> <p>Low</p> <p>Low</p> <p>Ongoing</p>

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Recreation and visitor use (continued)</p> <p>Car rallying occurs occasionally in the neighbouring Bulga and Dingo Tops State Forests. Tapin Tops National Park is occasionally used as a transport stage for vehicles.</p>		<ul style="list-style-type: none"> No car rallying or marshalling points are to occur in the planning area, and any future use of the planning area as a transport stage for rally vehicles will be discouraged. 	Ongoing
<p>Cultural heritage</p> <p>The planning area is significant to the local Aboriginal people. Nine Aboriginal sites have been identified in the planning area and a further two potential cultural sites require investigation.</p> <p>The planning area contains examples of past logging practices and the remains of an old burnt hut.</p>	<ul style="list-style-type: none"> Protection of Aboriginal heritage values associated with the planning area. Improved understanding of the cultural heritage significance of the planning area. Increased involvement of the local Aboriginal community in cultural heritage management of the planning area. 	<ul style="list-style-type: none"> Liaise with the local Aboriginal people including the Biripi and Purfleet-Taree LALC and Birpai and Bunyah LALC, Elders groups and traditional owners about all aspects of Aboriginal site management in the planning area. Investigate the two potential Aboriginal cultural sites within the planning area. Encourage further research into the Aboriginal and historic heritage values of the planning area including into the remains of the hut in Biriwal Bulga National Park. Ensure that any Aboriginal sites found are recorded in the NPWS Aboriginal Sites Registrar. Monitor and protect Aboriginal objects in the planning area. 	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Pest species</p> <p>The NPWS Mid-North Coast regional pest management strategy highlights wild dog control as a high priority for the planning area (NPWS 2002c). A pest animal management plan for the planning area is yet to be prepared.</p> <p>The mapping of pest plants and rehabilitation plans for weed infested areas in the planning area has yet to be undertaken.</p> <p>The pine plantation in Biriwal Bulga National Park is starting to invade neighbouring native forests and could become an environmental weed in the park.</p> <p>Wild dogs, including dingoes, have been declared as pest animals under the RLP Act. The planning area has been identified as a dingo management area. Under the RLP Act, NPWS is required to help in the preparation of a wild dog management plan for dingo management areas.</p> <p>Stock stray into the planning area from neighbouring grazing properties.</p>	<ul style="list-style-type: none"> • Pests are controlled and where possible eradicated. • The pine plantation from former state forest tenure is removed and the area is rehabilitated. • The impact of introduced species on native species and neighbouring lands is minimised. • Livestock do not enter the planning area. 	<ul style="list-style-type: none"> • Prepare and implement a pest management strategy and rehabilitation plan for the planning area. This will include the mapping of areas of major pest plants and animals. • Priority will be given to controlling pines outside the plantation area and controlling small infestations of weeds that threaten the integrity of the surrounding habitat. • The pines in the plantation area may be used for NPWS training exercises, such as chainsaw courses, with the eventual goal of eradicating them from the reserve. Planting of endemic species will be undertaken where necessary. • Assist in the preparation and implementation of a wild dog management plan approved by the Kempsey RLPB. Pending preparation of the plan, continue the wild dog-baiting program for Biriwal Bulga National Park. • Conduct pest control programs in conjunction with other organisations such as the Kempsey RLPB, the Mid North Coast Weeds Advisory Committee, SFNSW and neighbours as appropriate. • Cooperate with neighbours in fencing problem areas to prevent stock from entering the planning area. Provide fencing assistance as necessary in accordance with NPWS policy. 	<p>High</p> <p>High</p> <p>Medium</p> <p>Medium</p> <p>Medium</p> <p>Medium</p>

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Fire management</p> <p>Inappropriate fire regimes are a major threat to biodiversity in the planning area, and in particular to wet sclerophyll forest and rainforest.</p> <p>Most fires in the planning area are generally caused by incendiarism and escaped rural burns. Occasionally, lightning strikes have caused fires.</p> <p>Fire management strategies are yet to be prepared for the planning area.</p>	<ul style="list-style-type: none"> • Fire in the planning area is managed to protect property, human life and biodiversity. • Cooperative approach for fire management with neighbours and all fire authorities. 	<ul style="list-style-type: none"> • Prepare and implement fire management strategies for the planning area. • Bush fire risk will be managed in accordance with the Hastings and Greater Taree Bush Fire Risk Management Plans and the fire management strategies for the planning area. • Provide assistance to other agencies in fighting fires that threaten to enter the planning area. • Establish and maintain good communication with neighbours, local Rural Fire Service brigades and SFNSW to manage and control fire in and adjoining the planning area. • As far as practicable, maintain a fire free interval of at least 10 to 15 years in dry sclerophyll forest types and protect rainforest and wet sclerophyll from fire. 	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>High</p>
<p>Research and monitoring</p> <p>There has been little research done in the planning area. The most comprehensive research was undertaken as part of the State Forests of NSW Wingham Management Area EIS (1992).</p> <p>The planning area provides good research opportunities, particularly as a biodiversity reference area.</p>	<ul style="list-style-type: none"> • Improved understanding of the values of the planning area and their corresponding threats. 	<ul style="list-style-type: none"> • Conduct surveys in the planning area for fauna, flora and pest species. • Where recovery plans have been prepared for threatened flora and fauna, research and monitoring will be guided by these plans where relevant. • Encourage research. Priority topics include: <ul style="list-style-type: none"> - surveys for predicted threatened flora and fauna; - identification of World Heritage values; - Aboriginal cultural heritage; and - non-Aboriginal history. 	<p>Medium</p> <p>Medium</p> <p>Low</p>

Current Situation	Desired Outcomes	Strategies	Priorities
<p>Management operations</p> <p>The network of roads and trails in the planning area has been assessed for access for visitors, management purposes and neighbours.</p> <p>Several roads in the park provide access to neighbouring properties. They are classed as Ministerial roads. These roads will be retained to provide access to these properties.</p>	<ul style="list-style-type: none"> • Access arrangements are formalised with neighbours who rely on park roads and trails for access. • The management trail network adequately serves management needs and has minimal impact. 	<ul style="list-style-type: none"> • Negotiate access agreements with relevant neighbours regarding roads and trails used to access the reserves and their properties. These arrangements should include sharing of maintenance costs and labour. • Retain roads and management trails within the planning area as shown on the map. Close all other trails and address erosion issues, with rehabilitation where necessary. • Management trails will be gated as necessary to restrict unauthorised access. • Establish guidelines for trail maintenance in the planning area. • Rename as management trails Grey Gum Forest Road and other roads to be managed as management trails. 	<p>High</p> <p>High</p> <p>High</p> <p>High</p> <p>Medium</p>

High priority activities are those imperative to achievement of the objectives and desired outcomes. They must be undertaken in the near future to avoid significant deterioration in natural, cultural or management resources.

Medium priority activities are those that are necessary to achieve the objectives and desired outcomes but are not urgent.

Low priority activities are desirable to achieve management objectives and desired outcomes but can wait until resources become available.

Once a plan has been adopted by the Minister it must be implemented, and no operations may be undertaken except in accordance with the plan. If after adequate investigation, operations not included in the plan are found to be justified, the plan may be amended in accordance with section 73B of the Act.

This plan applies both to the land currently reserved and to any future additions. Where management strategies or works are proposed for additions that are not consistent with the plan, an amendment to the plan will be required.

5 REFERENCES

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