

# **Brindabella National Park and State Conservation Area**

## **Plan of Management**

**National Parks and Wildlife Service**

**Part of the Department of Environment and Climate Change NSW**

**April 2009**



**This plan of management was adopted by the Minister for Climate Change and the Environment on 27<sup>th</sup> April 2009.**

## **Acknowledgments**

This plan of management is based on a draft plan prepared by staff from South West Slopes Region of the National Parks and Wildlife Service (now the Parks and Wildlife Group of the Department of Environment and Climate Change), with assistance from specialists in Environment ACT.

Photograph of the park looking north from Mt Coree by Stuart Cohen, DECC.

The following key documents greatly assisted in the preparation of this plan of management;

Butz, M. 1980. *The Proposed Brindabella National Park, South Eastern Region - Resource Investigation Report.*

Doherty, M. 1997. *Vegetation Survey and Mapping of Brindabella National Park and Adjacent Crown Lands.* A Report Prepared for the New South Wales National Parks and Wildlife Service. CSIRO.

Hansen, S, Moss, M and Read, S. 1996. *Hume Sawmill Brindabella National Park New South Wales Preliminary Report.* A Report prepared for New South Wales National Parks and Wildlife Service.

NSW National Parks and Wildlife Service. 1998. *Draft Fire Management Plan, Brindabella National Park.* NSW National Parks and Wildlife Service.

Taylor, S.C. and Lupica, P. 1998. *A Preliminary Survey of Vertebrate Fauna in Brindabella National Park.* A Report compiled for the NSW National Parks and Wildlife Service, Queanbeyan District.

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## FOREWORD

Brindabella National Park and Brindabella State Conservation Area are located in southern New South Wales and adjoin the Australian Capital Territory, 30 kilometres west of Canberra. They cover an area of 21,352 hectares and are at the northern extent of the Brindabella Range and at the northern limit of the Australian Alps National Parks.

Brindabella National Park and State Conservation Area consist of steep forested country. They are significant for their biodiversity, landscape, cultural and recreational values.

Flora and fauna surveys in the national park and state conservation area have identified 12 flora species of regional significance and 13 threatened fauna species. The vegetation ranges from low altitude open forest to montane tall open forest. The cultural heritage of the area includes sites containing Aboriginal artefact scatters, historic border markers, sawmill ruins, a fire observation hut and remnants of former grazing practices. There are a number of picnic areas, camping areas and lookouts as well as an extensive system of vehicle trails which provide recreational touring opportunities.

The *National Parks and Wildlife Act 1974* requires the preparation of plans of management and details the process for preparation, exhibition and adoption of a plan of management. A draft plan of management for Brindabella National Park and Brindabella State Conservation Area was placed on public exhibition from 23<sup>rd</sup> September until 19<sup>th</sup> December 2005. The submissions received were carefully considered before adopting this plan.

This plan of management establishes the scheme of operations for Brindabella National Park and Brindabella State Conservation Area. It contains a number of actions to help achieve Priority E4 in the State Plan, *Better environmental outcomes for native vegetation, biodiversity, land, rivers, and coastal waterways*, including cooperative management programs targeting pest plant and animal species, upgrading of management trails to provide improved access for fire fighting vehicles, and revision of the fire management plan. The plan also contains a number of actions to help achieve Priority E8 in the State Plan, *More people using parks, sporting and recreational facilities, and participating in the arts and cultural activity*, such as improved access for driving and horse riding, and the redevelopment of camping areas at Flea Creek, McIntyres Hut and Lowells Flat and the day use area at Mount Coree.

In accordance with section 73B of the *National Parks and Wildlife Act 1974*, this plan of management is hereby adopted.

**Carmel Tebbutt MP**  
**Deputy Premier**  
**Minister for Climate Change and the Environment**



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## **PART A. BRINDABELLA NATIONAL PARK AND STATE CONSERVATION AREA**

### **1. LOCATION, RESERVATION AND REGIONAL SETTING**

Brindabella National Park and Brindabella State Conservation Area (SCA) are located in southern New South Wales and adjoin the Australian Capital Territory, 30 kilometres west of Canberra. Brindabella National Park (comprising 18,472 hectares) and Brindabella SCA (comprising 2,880 hectares) are collectively referred to as “the park” in this draft plan of management.

Brindabella National Park was reserved in April 1996. Prior to declaration most of the western section of the park was crown land leased to the ACT Bushfire Council while the eastern block was vacant crown land. A further approximately 700 hectares of land in the Mount Coree area, located between the original park boundary and the ACT/NSW border north-east of Mount Coree, was added to the park in 1999.

As an outcome of the Regional Forest Agreement (2000) approximately 8,990 hectares was added to the park on 1 January 2001. This area was significant in that it added an extensive parcel of land along the Goodradigbee River that has historically been the focal point of recreation users in the region. At the same time an additional 2880 hectares was added to the park as State Conservation Area.

The park is the northern-most of a number of alpine protected areas including Kosciuszko National Park, Bimberi Nature Reserve, Yaouk Nature Reserve and Scabby Range Nature Reserve in NSW; Alpine, Snowy River and Mt Buffalo National Parks in Victoria and Namadgi National Park in the ACT.

Not all of the lands surrounding the park are protected areas. Substantial areas of naturally vegetated crown and private lands exist immediately to the west and north of the park, while agricultural lands dominate to the east and north east. The ACT Government managed Uriarra Pine Forest is adjacent to the park’s south east boundary. The Goodradigbee River lies along the western boundary of the park. The ACT/NSW border forms the south-east boundary of the park.

### **2. IMPORTANCE OF BRINDABELLA NATIONAL PARK AND SCA**

The park is significant due to its biodiversity, landscape, cultural and recreational values.

Key **natural values** include:

- a diverse flora including 462 recorded indigenous species in a variety of communities typical of the northern Australian Alps, tablelands and slopes, most commonly open forest, tall open forest and heath/swamp communities;
- twenty one plant species regarded as regionally significant as they occur at the limit of their known distribution;
- thirteen threatened fauna species and potential habitat for numerous other threatened species;

- the park is a major habitat of the nationally endangered Northern Corroboree Frog (*Pseudophryne pengellyi*);
- Mount Coree is recorded as a significant Bogong Moth aestivation site; and
- much of the park has been recognised as possessing values that satisfy the criteria for wilderness declaration under the *Wilderness Act 1987*.

Significant **landscape values** of the park include:

- the rugged forested Brindabella Range including Mount Coree, the most visually prominent natural feature in the area and a site which affords expansive views of the surrounding landscape. Additionally, the skyline of the Brindabella Range is obvious from residential Canberra and makes a significant contribution to the natural vistas from the city.
- a contribution to the maintenance of Canberra's domestic water quality through the incorporation in the park of part of the catchment of the Cotter River.

**Cultural heritage values** of the park comprise:

- evidence of the long association of Aboriginal people with the area; and
- sites that demonstrate the non-Aboriginal occupation and use of the area, most notably the remains of Hume Sawmill and Bag Range Hut.

The key **educational and scientific values** of the park are:

- the opportunities it offers for environmental education and field studies;
- a role as a scientific reference area and opportunities for scientific studies of natural ecosystem processes, threatened species and fire ecology; and
- opportunities for the Aboriginal community to inform the Aboriginal and non-Aboriginal community about traditional use of the area.

Major **recreation and tourism values** include:

- opportunities for recreational use in a semi-remote essentially unmodified sub-alpine environment. This complements more intensive recreational opportunities available elsewhere in the Australian Alps; and
- opportunities for vehicle based recreational use in a natural environment close to Canberra.



## **PART B. MANAGEMENT CONTEXT**

### **3. NATIONAL PARKS IN NEW SOUTH WALES**

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.

### **4. STATE CONSERVATION AREAS**

State conservation areas (SCAs) are reserved under the NPW Act to protect and conserve areas that contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance; that are capable of providing opportunities for sustainable visitor use and enjoyment, the sustainable use of buildings and structures or research; and that are capable of providing opportunities for uses permitted under other provisions of the Act.

Under the Act, state conservation areas are managed to:

- conserve biodiversity, maintain ecosystem functions, protect natural phenomena and maintain natural landscapes;
- conserve places, objects and features of cultural value;
- provide for the undertaking of uses permitted under other provisions of the NPW Act (including uses permitted under section 47J such as mineral exploration and mining), having regard to the conservation of the natural and cultural values of the state conservation area;
- provide for sustainable visitor use and enjoyment that is compatible with conservation of the area's natural and cultural values and with uses permitted in the area;
- provide for sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to conservation of the area's natural and cultural values and with other uses permitted in the area; and
- provide for appropriate research and monitoring.

The NPW Act also requires review of the classification of SCAs every 5 years to determine whether they should receive either a national park or nature reserve classification. The classification review for SCAs is described in section 47M of the Act and is undertaken in consultation with the Minister administering the *Mining Act 1992*.

## 5. AUSTRALIAN ALPS NATIONAL PARKS AGREEMENT

### Australian Alps – Introduction

Stretching from Canberra through the ACT's Brindabella Range to the Snowy Mountains of NSW and along the Great Divide through eastern Victoria, Australia's alpine and subalpine environments are unique and special. They have been important to Indigenous people for thousands of years, and their rich Aboriginal heritage is increasingly recognised and celebrated; they have a strong and fascinating European heritage; and their value and significance will continue to grow in the future.

As a generally well-watered, snow-clad and mountainous area in a predominantly dry and flat continent, the alpine region and its national parks are of great significance both for Australians and for the world. They contain:

- mainland Australia's highest peaks and most spectacular mountain scenery
- flora and fauna, plant and animal communities and ecological processes that are varied, full of interest and unique to Australian alpine and subalpine environments
- a range of sites, places and landscapes that are valued by the community, and a rich and diverse Aboriginal and European cultural heritage.
- a magnificent outdoor recreation and tourism resource for Australians and international visitors
- the headwaters of major river systems which supply snowmelt waters vital for the maintenance of ecological processes and communities, domestic use, industry, irrigation and hydro-electric production in New South Wales, Victoria, the ACT and South Australia.

### Australian Alps Cooperative Management Program

Eleven parks and reserves, protecting over 1.6 million hectares, are collectively referred to as the *Australian Alps National Parks*. The major reserves - Kosciuszko, Namadgi, Alpine, Mount Buffalo and Baw Baw National Parks - are well known to much of the community of south-eastern Australia. Brindabella National Park, Bimberi and Scabby Nature Reserves in NSW, Tidbinbilla Nature Reserve in the ACT, and Victoria's Avon Wilderness Park, are becoming better known.

With the signing of the first Memorandum of Understanding (MOU) in 1986, State, ACT and Australian government conservation agencies formally agreed to manage this vitally important national asset cooperatively. The most recent revision and strengthening of the MOU was in 2003.

The Australian Alps Liaison Committee (AALC) was formed in this spirit of cooperation to ensure that the national parks and reserves in the Australian Alps are managed as one biogeographical entity to protect them for generations to come.

The agencies that are signatories to the MOU have agreed to develop and implement the "one park" planning philosophy by adopting common planning and management approaches. These agencies are:

- Department of Environment and Conservation (NSW)
- Environment ACT
- Parks Victoria
- Department of the Environment and Heritage (Australian Commonwealth Government).

Responsibility for day-to-day management of the Australian Alps National Parks listed in the MOU remains with the relevant participating agency. The majority of works carried out in the parks are undertaken by agencies in accordance with statutory management plans and approved strategies within their jurisdictions.

## **PART C. OBJECTIVES OF MANAGEMENT**

### **6. OBJECTIVES**

#### **6.1 Specific Objectives For Brindabella National Park and SCA**

In addition to the general objectives (Sections 3 and 4), the management of the park will be subject to the following more specific objectives:

- protection of the park as part of the system of protected areas of the Australian Alps, with emphasis on maintaining ecological relationships with the park and adjoining and nearby protected areas.
- protection of catchments and water quality within the park, with priority to the protection of Canberra's domestic water supply.
- protection of the range of plant and animal communities within the park, with particular attention to the maintenance of populations of threatened or regionally significant species.
- provision of a limited number of visitor facilities at a basic standard consistent with remote use of the park by an increasing number of people.
- development and maintenance of close ties and cooperative land management operations with adjoining public and private land managers.
- management of a large area of remote bushland to maintain and enhance opportunities for recreation, while ensuring the maintenance of natural processes.

#### **6.2 Overall Strategy**

The park will be managed as a significant area of native plant and animal communities at the northern limit of the Australian Alps. Maintenance of links with other protected areas in the Alps will assist in ensuring that the ecological integrity of the area is not degraded.

The protection of native plant and animal communities will be achieved by minimising, and where possible eliminating, threats such as introduced flora and fauna and inappropriate or unsustainable human use of the area. A fire management strategy consistent with protecting life and property as well as maintaining native plant and animal diversity in a regional context will be developed and revised as necessary.

Management of historic sites within the park will be consistent with the provisions of the Burra Charter, while Aboriginal sites will be protected and managed in close co-operation with local Aboriginal communities.

Recreational use of the park will be managed to complement the diversity and abundance of opportunities available in other Australian Alps protected areas. In recognition of the opportunity the park provides for semi remote experiences in unmodified natural environments, as well as the topographic and soil constraints on vehicle access to the area, management of public use of the park will centre on the limited provision of access and facilities at minimal and basic standards.

Survey and research will be encouraged to improve understanding of the diversity and management needs of the native plants and animals in the park. Close liaison will be maintained with management authorities surrounding the park, including private landholders, on issues of common interest such as fire and pest plant and animal management.

## **PART D. POLICIES AND FRAMEWORK FOR MANAGEMENT**

This section of the plan contains the policies and framework for the management of the park together with relevant background information. Policies are summarised under the following section headings:

- 7. Natural Heritage**
- 8. Cultural Heritage**
- 9. Use of the Area**

Where not specifically provided for in this plan, management of the park will be in accordance with the *National Parks and Wildlife Act 1974*, *National Parks and Wildlife Regulation 2002* (or as amended from time to time) and with general NPWS policies.

### **7. NATURAL HERITAGE**

#### **7.1 Geology, Soils and Landscapes**

In broad geological terms the vast Lachlan Fold Belt, extending from the Queensland border through mid western NSW and Victoria to the eastern half of Tasmania, incorporates the park in its entirety. The park lies within the Gilgandra - Cowra - Yass Zone of the fold belt (Basden and Scheibner, 1996) and its component Goodradigbee Block.

Most of the park lies on Lower Devonian (395-375 million years old (m.y.o.)) acid volcanic rocks of the Black Range Group. The major component of the Black Range Group is the Mountain Creek Volcanics made up primarily of rhyolite, andesite and dacite. Other components of the Black Range Group are Kirawin Shale and Sugarloaf Creek Tuff which are evident in the park's north west in the vicinity of Cody's Spur.

A north-south fault lies along Mullion Creek and separates the Mountain Creek Volcanics from the steeply dipping, older, Ordovician (500-435 m.y.o.) metasediments which lie east of Dingo Dell. These Ordovician metasediments are mostly interbedded fine grained greywackes, slates and quartzites. A small area of Silurian (435-395 m.y.o.) Paddys River Volcanics incorporating dacite, acid tuff, calcareous shales and phyllites is found near the Two Sticks Road.

The soils of the park have not been comprehensively mapped to date, although Butz made some observations during his 1980 appraisal of the area. Soil fertility is generally low throughout the park. Due to their depth, stability, friability and moisture retention characteristics the most fertile soils in the park are the red forest loams developed on mid slopes with Mountain Creek Volcanics as the parent material. All soils in the park are prone to erosion, but this varies from those on Ordovician metasediments (least prone to erosion) to those in stream banks (extremely erosion prone). Some soils are more susceptible to erosion when dry, particularly in the event of sudden storms with flash runoff. The poorly developed structure of all but the red forest loams also makes

most soils susceptible to surface compaction and reduced porosity after removal of vegetative cover or mechanical disturbance. This is more noticeable after fire events such as those that occurred in 2003.

The landscape of the park is dominated by the Baldy Range that runs NE/SW, and the NW/SE oriented Webb Range. The two ranges lie on the eastern and western boundaries of the headwaters of Mountain Creek and are separated by a series of broad gullies. The height of each range is approximately 1200 metres above sea level while the gullies between descend in some areas to 800-900 metres above sea level. At 1421 metres Mount Coree, in the south eastern corner, is the park's highest point and affords expansive views in all directions, including the Nation's Capital thirty kilometres to the east. The summit area itself is small with steep slopes occurring on all approaches. Steep cliffs occur on the north west face of the mountain.

According to Doherty (1997) most of the park is typically montane or tablelands in character as opposed to the sub-alpine nature of higher peaks south of the park. Only small higher altitude areas of the park may be characterised as sub-alpine.

The north-east section of the park is typical of lower altitude tablelands vegetation. While the landscape of this area of the park is not spectacular, at a height of 979 metres and immediately east of the park, Pig Hill offers views over the agricultural lands and outskirts of Canberra.

The rugged landform of the park and of Mount Coree in particular has high natural landscape value, contrasting with the surrounding pine plantations and cleared agricultural landscapes. Additionally, the skyline of the Brindabella Range is a prominent feature from residential areas of Canberra and contributes to its landscape setting.

The park contains large areas of catchment for the Murrumbidgee and Goodradigbee Rivers in New South Wales, both of which are of significant value as water supplies for domestic and agricultural use. The 1999 addition to the park in the Coree Flats area (immediately north east of Mount Coree) contains headwaters of the catchment of the Cotter River and Cotter Dam (a water supply for Canberra).

Although no sampling has been undertaken, water quality within the park is expected to be high as all of the park's watercourses originate in the park.

## **Policies**

- Erosion is recognised as a naturally occurring process. Where erosion has been accelerated by human activity or is threatening significant habitats or other values, appropriate control measures will be undertaken.
- All works will be sited, designed and undertaken in a manner that minimises soil erosion and aesthetic impacts on the parks landscape.
- The NPWS supports the principles of total catchment management and will liaise with territory and local governments and other authorities to maintain and improve the water quality of the Cotter, Murrumbidgee and Goodradigbee catchments.

## **Action**

- Areas of soil erosion will be mapped and prioritised for rehabilitation works.

## **7.2 Climate**

The park lies at the northern limit of the Australian Alps as it merges into the Southern Tablelands. Consequently the climate of the park is drier and warmer than the Alps to the south but moister and cooler than the Tablelands. Climatic records have not been kept for any site within the park. However, by comparing records from a number of recording stations to the east and south of the park, the NPWS (1998) estimates the mean annual rainfall for the park as between 900 and 1250 mm, depending upon elevation. Dry periods may occur at any time of the year but are prevalent from December to mid March. Mean temperatures for the park were estimated by the NPWS (1998) to be several degrees lower than in Canberra where mean maximums range from 28°C in January to 11.1°C in July.

Snow falls to approximately 1100 metres altitude are common and may persist on the ground for several days at elevations of around 1200 metres. Severe frosts occur frequently in winter even at lower elevations in the park.

Climate change has been listed as a key threatening process under the TSC Act. Projections of future changes in climate for NSW include higher temperatures, increasing sea levels and water temperatures, elevated CO<sub>2</sub>, more intense but possibly reduced annual average rainfall, increased temperature extremes and higher evaporation. These changes are likely to lead to greater intensity, duration and frequency of fires, more severe droughts and increased regional flooding.

Climate change may significantly affect biodiversity by changing population size and distribution of species, modifying species composition, and altering the geographical extent of habitats and ecosystems. Species most at risk are those unable to migrate or adapt, particularly those with small population sizes or with slow growth rates. The potential impact of climate change is difficult to assess since it depends on the compounding effects of other pressures, particularly barriers to migration and pressure from weeds and feral animals. Programs to reduce pressures arising from such threats will help reduce the severity of the effects of climate change.

NPWS acknowledges the challenges of managing for climate change and is committed to supporting research and monitoring to assist in the on-ground management of those species and communities considered to be at risk from climate change. Due to the limited knowledge on the nature of these impacts, a precautionary management approach will be applied.

## **Policy**

- The climate of the area has important implications for recreational use of the park. Periodic closure of access tracks within the park may be necessary during times of high soil moisture content from rain and/or snowfall or during high fire danger periods (see Section 7.1.1). The high summer temperatures and the unreliability of natural water supplies in the park will also need to be considered in the promotion of recreation opportunities in the park (see Section 7.2).

## **7.3 Native Plants**

The park is contiguous with other larger protected areas to the south and south-east to form a network that offers protection to large areas of alpine, sub-alpine and montane vegetation. The park contains a diversity of vegetation types and represents limits of distribution for some species.

The vegetation communities of the park have been mapped and described in the report, "Vegetation Survey and Mapping of Brindabella National Park and Adjacent Crown Lands", based on field work co-ordinated by Michael Doherty of the CSIRO's

Division of Wildlife and Ecology. The summary of vegetation communities in this section of the plan is primarily based on the findings of the above survey and the resulting report.

A total of 459 species (407 vascular and 52 non-vascular plants) have been recorded in the park.

Three main vegetation groups reflecting the climatic, topographic and geological patterns of the area were identified:

- communities generally occurring in the lower drier areas, dominated by open forest types;
- communities generally occurring in the moister higher altitude areas, dominated by open forest and tall open forest types; and
- heath or swamp vegetation with distinctive groupings of species.

In general, species richness is greater on sites with granitic parent materials such as those areas on Mountain Creek Volcanics. Low altitude open forest types in Doherty's classification can be equated with dry sclerophyll communities of other earlier classification systems.

Further classification of these three broad groupings allowed Doherty to identify 16 vegetation types in his study area (which extended beyond the boundaries of Brindabella National Park). Each of the vegetation communities identified by Doherty are well represented in either the South Eastern Highlands or NSW South-west Slopes bioregion and across the Australian Alps national parks and protected areas. There is considerable species overlap between communities. Summary information on each of these vegetation types is provided in Table 1.

Previous fire regimes and land uses have influenced the distribution, structure and composition of vegetation communities in the park. From field observation Doherty (1997) concluded that virtually all of the woody species within the park are resprouters after fire. An exception to this observation is Alpine Ash (*Eucalyptus delegatensis*) which is killed by high intensity fire and only regenerates from seed stores released after fire. Stands of Alpine Ash are found in the less fire prone areas such as south-easterly facing slopes.

Apart from fire, the main disturbances to plant species are grazing and digging by feral animals (section 5.6 provides further information). There is evidence of past timber extraction in the north of the park at Hume Sawmill and clearing for grazing at California Flats. With the cessation of these activities both areas are regenerating well. However, these and other disturbed areas in the park have been invaded by introduced pine trees.

**Table 1: Vegetation Communities of the park**

Vegetation Type	Broad Vegetation Group	Dominant Species
1	Low Altitude Open Forest	Broad-leaved Peppermint Gum ( <i>Eucalyptus dives</i> ) and Brittle Gum ( <i>E. mannifera</i> )
2	Low Altitude Open Forest	Broad-leaved Peppermint Gum, Brittle Gum and Red Stringybark ( <i>E. macrorhyncha</i> ) (species rich)
3	Low Altitude Open Forest	Red Stringybark and Large Flowered Bundy ( <i>E. nortonii</i> )
4	Low Altitude Open Forest	Broad-leaved Peppermint Gum, Brittle Gum and Red Stringybark (species poor)
5	Low Altitude Open Forest	Apple Box ( <i>E. bridgesiana</i> ) and Yellow Box ( <i>E. melliodora</i> )
6	Low Altitude Open Forest	Mountain Gum ( <i>E. dalrympleana</i> ) and Broad-leaved Peppermint Gum
7	Low Altitude Open Forest	Mountain Gum, Broad-leaved Peppermint Gum and Snow Gum ( <i>E. pauciflora</i> ).
8	High Altitude Tall Open Forest	Mountain Gum and Narrow-leaved Peppermint Gum ( <i>E. radiata</i> )
9	High Altitude Tall Open Forest	Mountain Gum and Alpine Ash ( <i>E. delegatensis</i> )
10	High Altitude Open Forest	Mountain Gum and Snow Gum
11	Riparian Open Forest	Mountain Swamp Gum (subspecies <i>humeana</i> )
12	Riparian Open Forest	Manna Gum and Blackwood ( <i>Acacia melanoxylon</i> )
13	Riparian Tall Open Forest	River Sheoak ( <i>Casuarina cunninghamiana</i> )
14	Montane Tall Open Forest	Mountain Gum and Brown Barrel ( <i>E. fastigata</i> )
15	Montane Rocky Heath	Heterogenous species composition.
16	Swamp	A diversity of swamp species.
Regrowth Areas		
Cleared Areas		

### 7.3.1 Significant Species:

Button Wrinklewort (*Rutidosis leptorrhynchoides*) is the only rare or threatened plant species reported in the park. It is listed as endangered under the *Threatened Species Conservation Act 1995*. The plant, a perennial forb, was recorded by Butz (1980) from the Upper Mountain Creek area of the park – an area between 900 and 1100 metres above sea level. Other records of the species indicate it usually occurs to an altitude of approximately 800 metres above sea level (Zich, 1992). The latest survey conducted by Doherty did not locate the species. A Draft Recovery Plan has been prepared for



Button Wrinklewort (Zich, 1992). Further research and survey is required to confirm the presence of this species in the park.

A further 21 species are listed by Doherty (1997) as being regionally significant as they reach the limit of their known distribution in his study area. Species at the limit of their distribution are regarded as significant as they may assist in defining environmental restrictions on distribution, may be under stress due to adverse environmental conditions or may be at risk of becoming isolated populations and potentially evolving into subspecies.

Table 2 provides additional information on 12 of these species that occur in the park.

**Table 2: Flora species of Significance (from Doherty, 1997)**

Species	Habit	Significance
<i>Blechnum patersonii</i>	Fern	Western limit – reported from Coree Creek near Devil's Peak.
<i>Eucalyptus camphora</i> <i>ssp. humeana</i>	Tree to 20m. Occurs on moist flats.	Possible eastern limit.
<i>Eucalyptus delegatensis</i>	Tree to 50m.	Northern limit near Baldy Range.
<i>E. fastigata</i>	Tree to 50m.	Western limit, although unconfirmed occurrence further west at Bago SF.
<i>Grevillea victoriae</i> and <i>G oxyantha</i>	Spreading or erect shrub to 4m.	Northern limit for both species. <i>G. victoriae</i> currently being redefined as two species.
<i>Leptospermum micromyrtus</i>	Shrub to 3m.	Northern limit on Baldy Range.
<i>Orites lancifolia</i>	Shrub to 2m, often prostrate.	Northern limit likely to be in park.
<i>Pimelea pauciflora</i>	Shrub to 3m.	Northern limit in the park.
<i>Prostanthera sp. aff. phyllicifolia</i>	Erect and compact to spreading shrub to 2m.	Identity of species to be determined.
<i>Prostanthera sp. aff. rugosa</i>	Open shrub to 1.5m.	Identity of species to be determined.
<i>Pultenaea juniperina</i> <i>var. mucronata</i>	Erect shrub.	Occurs as two disjunct populations – park is northern limit of southern population.
<i>Sphagnum sp.</i>	Moss.	Small patches located at Coree Flats.

Also of interest in the park is the existence of a small pocket (<20ha) of Box-Gum woodland. This is a component of the White Box-Yellow Box-Blakely's Red Gum Woodland which is listed as an Endangered Ecological Community under the TSC Act.

## Policies

- Native vegetation will be managed to:
  - maintain floristic and structural diversity;

- conserve the threatened or otherwise significant species known to occur in the park;
  - encourage regeneration of areas previously cleared; and
  - maximise habitat values for native animals.
- Cleared areas will be managed to encourage regeneration of native vegetation.
  - The Draft Fire Management Plan for the park will incorporate fire prescriptions consistent with the conservation and maintenance of communities and significant species known to occur in the park.

### Actions

- The NPWS will undertake monitoring of the abundance and vigour of vegetation species in order to gauge and improve the effectiveness of management actions.
- Research will be encouraged to confirm the presence and distribution of Button Wrinklewort.

### 7.4 Introduced Plants

An introduced species is defined in this plan as any plant species not native to this park. Introduced species within the park and on adjoining land are of concern because they have the potential to have detrimental effects on ecological values and can spread to and from neighbouring land.

The NPWS South West Slopes Region Pest Management Strategy (2004) identifies priority pest plant and animal species and programs for action through set criteria. By following a similar process the prioritisation of pest species programs may be established and directly linked into the regional strategies (refer to the South West Slopes Region Pest Management Strategy). This risk analysis will consider such issues as (yet not limited by) the control of weeds in endangered ecological communities, significant remnant vegetation associations, threatened/endangered species habitat and areas of community/neighbour concern. The risk of new weed incursions will also be considered.

The flora survey of the park recorded 50 weed species in the park although a distribution map for each species was not produced. Observations by staff and some limited comments in the "Vegetation Survey and Mapping of Brindabella National Park and Adjacent Vacant Crown Lands" provided the basis for the comments below.

One of the legacies of previous tenures and uses of the park is the number of introduced plant species in the area. Areas associated with creeks, riparian flats and access tracks where previous grazing and logging activities were focused are most affected. Species posing the most serious problem in localised areas are Blackberry (*Rubus fruticosus*), St John's Wort (*Hypericum perforatum*) and Briar Rose (*Rosa rubiginosa*). Other problem weed species include Willows (*Salix spp.*), Yarrow (*Achillea millefolium*) and Paterson's Curse (*Echium plantagineum*).

One of the ongoing weed management issues for the park arises from the proximity of extensive areas of pine plantations. The vegetation survey of the park and surrounding lands identified five species of conifer which had established outside the plantations. The most common species was Radiata Pine (*Pinus radiata*) which was evident in disturbed and undisturbed areas. Several studies in the ACT of Radiata Pine movement into undisturbed dry open sclerophyll forest (similar to Doherty's vegetation units 1 to 7) found an initial spread by wind and birds established seedlings which

eventually set seed themselves and resulted in small areas of individuals around the original founder tree. The growth rate of established pines was found to be seven times that of eucalypts. The studies also identified an apparent correlation between the successful establishment of pines and a decrease in the number of juvenile *Eucalyptus* spp. The densest invasions tend to occur at sites with poor shallow soils. In the absence of fire the potential exists for self replacing stands of Radiata Pine to become established. Radiata Pines do not seed in their first nine years, providing a window of opportunity for eradication efforts.

The *Noxious Weeds Act 1993* 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.

### **Policies**

- Introduced plant control programs will reflect a balance between the need to use the most effective control techniques and a desire to minimise non target effects. Integrated control programs using a variety of techniques will be adopted where possible.
- The cooperation and advice of other authorities and park neighbours will be sought in implementing weed control programs.

### **Actions**

- The NPWS will co-ordinate the completion of a comprehensive survey and subsequent mapping of weed species within the park.
- Exotic pines will be controlled. It is the NPWS's intention that juvenile trees will be controlled before they are old enough to set seed.
- Priority weed species will be controlled, and if possible eradicated. Priority for annual control treatment will be given to blackberry, briar rose and pine trees as well as other noxious or invasive species (eg St Johns Wort) which may be identified in the park during the life of this plan.
- Weed species impacting upon recreational use areas of the park will be targeted as a priority. These areas include the extensive blackberry infestations along the Goodradigbee River at Flea Creek, McIntyres Hut and Lowells Flat camping areas.

## **7.5 Native Animals**

A preliminary survey of the fauna of Brindabella National Park was undertaken during March 1998 and involved observations and various sampling techniques at 25 sites in a range of vegetation communities within the park. Results of the survey add to limited previous records for the park from a brief survey of the area by Butz (1980) and other species specific fauna reports. In combination with these other fauna reports the survey established the presence of 60 species of birds, 19 species of mammals (5 introduced), 13 species of reptiles and 3 species of frogs.

The 1998 survey was conducted during a drought so it may reasonably be expected that future survey efforts will increase the number of recorded bird and frog species. Additionally, the survey did not sample the park's population of bats. The report lists a further 32 (1 introduced) species of birds, 20 species of mammals (1 introduced), 5 reptiles and 6 frogs which are likely to occur within the park.

### 7.5.1 Significant species

Fauna surveys and a search of the Atlas of NSW Wildlife revealed the following species, listed on the *Threatened Species Conservation Act 1995*, as having been recorded in the park:

#### Birds

Barking Owl	<i>Ninox connivens</i>	Vulnerable
Powerful Owl	<i>Ninox strenua</i>	Vulnerable
Olive Whistler	<i>Pachycephala olivacea</i>	Vulnerable
Pink Robin	<i>Petroica phoenicea</i>	Vulnerable
Gang-gang Cockatoo	<i>Callacephalon fimbriatum</i>	Vulnerable
Brown Treecreeper	<i>Climacteris picumnus</i>	Vulnerable
Speckled Warbler	<i>Pyrrholaemus sagittatus</i>	Vulnerable
Regent Honeyeater	<i>Xanthomyza phrygia</i>	Endangered
Diamond Firetail	<i>Stagonopleura guttata</i>	Vulnerable

#### Mammals

Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	Vulnerable
Yellow-bellied Glider	<i>Petaurus australis</i>	Vulnerable

#### Frog

Northern Corroboree Frog	<i>Pseudophryne pengellyi</i>	Vulnerable
Booroolong Frog	<i>Litoria booroolongensis</i>	Endangered

The biology of, and threats to, the Corroboree Frog have been well researched over the last twenty years. The population within the park is one of three geographically separate populations of the frog within New South Wales and the ACT, all of which occur in the Australian Alps. The Brindabella Range population of the frog has the most restricted distribution (60 square kilometres). The southern limit of the population is Mount Bimberi and the northern limit is near the old Hume Sawmill. Within the park the main threats to the Corroboree Frog are the collecting of individuals due to their striking appearance, invasion of breeding habitats by weeds such as blackberry, damage to breeding habitats by feral pigs and "controlled" burning activities. Osborne (1991) recommends that breeding sites should be given full protection from direct human disturbance, particularly any activity that has the potential to reduce water flow into the shallow breeding pools.

The report from the fauna survey of the park suggests that with further survey effort the following species of significance are also likely to be recorded:

#### Birds

Masked Owl	<i>Tyto novaehollandiae</i>	Vulnerable
Sooty Owl	<i>Tyto tenebricosa</i>	Vulnerable

#### Mammals

Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	Vulnerable
Common Bent-wing Bat	<i>Miniopterus schreibersii</i>	Vulnerable
Squirrel Glider	<i>Petaurus norfolcensis</i>	Vulnerable
Koala	<i>Phascolarctos cinereus</i>	Vulnerable
Smoky Mouse	<i>Pseudomys fumeus</i>	Endangered

### **Aquatic Fauna**

Liaison with Environment ACT has identified the following aquatic species which are listed in the ACT as threatened and require management intervention to ensure future survival:

Spiny crayfish	<i>Euastacus sp.</i>
Two-spined black fish	<i>Gadopsis bispinosus</i>
Macquarie perch	<i>Macquaria australasica</i>

Macquarie perch are also listed as vulnerable in NSW under Schedule 5 of the *Fisheries Management Act 1994*.

Other native aquatic species present within the park include:

Australian smelt	<i>Rotinna semoni</i>
Mountain galaxias	<i>Galaxias olidus</i>

### **Policies**

- The diversity and high quality of habitats for native animals occurring in the park will be conserved.
- Priority will be given to management strategies or programs that favour conservation of endangered and vulnerable fauna species. However, as far as possible programs will be designed to conserve the full range of native animal species in the park.
- Endangered and vulnerable native animals will be managed according to the provisions of the *Threatened Species Conservation Act 1995* and relevant Species Management or Recovery Plans.
- Special attention will be afforded to the requirements of endangered and vulnerable fauna in the planning and construction of additional visitor use sites within the park.
- The understanding and protection of native animals and their habitats will be promoted through the park's interpretation program.

### **Actions**

- Survey into the presence of fauna species of significance predicted to occur, as well as the parks bat and invertebrate populations will be encouraged.
- Management actions contained in Species Recovery Plans for species of significance known or likely to occur in the park will be implemented.
- Research into the distribution, abundance and habitat requirements of those endangered or vulnerable aquatic and terrestrial species recorded in the park will be encouraged.

### **7.6 Introduced Animals**

An introduced animal is defined in this plan as any animal species not native to the park. Introduced species within the park and on adjoining land are of concern because they have the potential to have detrimental effects on ecological values and can spread to and from neighbouring land.

Introduced animals in the park include foxes, rabbits, wild dogs, cats and pigs. The park is listed under Schedule 2 of Pest Control Order Number 2 under the *Rural Lands Protection Act 1998*. As directed by this Pest Control Order, the general destruction obligation of wild dogs is fulfilled by the approval of control methods described in the Brindabella and Wee Jasper Cooperative Wild Dog/ Fox Control Plan.

Wild dog control programs involving trapping and bait stations have been undertaken in response to stock loss problems on neighbouring properties. Wild dogs can be divided into three groups - dingos, hybrids with domestic dogs, and feral dogs. It is not known which type of dogs occur in the park. The NPWS considers the dingo to be part of the native fauna of NSW which it has a responsibility to conserve. The NPWS recognises, however, that wild dogs from NPWS lands can impact on livestock on adjacent areas and accepts the need for management to minimise their attacks on stock.

Pigs are also known to occur in the park and have been shown to frequently damage breeding areas used by Corroboree Frogs (Osborne 1991). The NPWS has implemented a pig control program in the park similar to that utilised with success in the nearby ACT-managed Namadgi National Park. The control program involves baiting co-ordinated with programs undertaken within Namadgi National Park.

Unconfirmed reports of deer and goats have also been received.

Species abundance and distribution information for pest and native animals is presently being gathered across the planning area and adjoining timbered lands as part of the monitoring component of the co-operative wild dog management plan for the Brindabella and Wee Jasper area.

Liaison with Environment ACT has identified introduced fish species including rainbow trout, brown trout, oriental weatherloach, mosquitofish, carp, goldfish, English perch and Atlantic salmon.

## **Policies**

- Introduced animals will be controlled where they have a significant impact on native species and adjoining land values. Control programs will be designed to avoid impact on non-target species and will be undertaken in cooperation with the Yass Rural Lands Protection Board and neighbouring land holders.
- Wild dog control will be undertaken in accordance with the NPWS Field Management Policy on Wild Dogs and the Brindabella Wee Jasper Wild dog/Fox control plan. This control will be implemented as part of a co-ordinated control program since no single land management agency can achieve effective control in isolation. This is of particular relevance to the park which is surrounded by heavily timbered country of differing tenure.
- Feral animal control programs will have an emphasis on those animals identified as priority control species within the Regional Pest Management Strategy.

## **Actions**

- Feral animal control programs targeting wild dogs, feral pigs and foxes, as well as other feral species which may be identified in the park, will be developed. Such programs will be implemented as a priority in consultation with adjoining neighbours, Yass RLPB and land management agencies. These programs will be co-ordinated to effectively implement programs across a number of land tenures.
- Research into the impact of feral animals on the parks native flora and fauna, particularly endangered and vulnerable species will be encouraged.

## 7.7 Fire Management

Management of fire in the park is an important and complex issue. Management must aim to achieve both long term conservation of natural communities and ongoing protection of life and property within and adjacent to the park.

A Draft Fire Management Plan for Brindabella National Park was prepared in 1999. The production of this Draft Fire Management Plan was overseen by a steering committee comprising fire agency representatives from the ACT and NSW Rural Fire Services and NSW National Parks and Wildlife Service. The Draft Fire Management Plan for Brindabella National Park applies equally to the Brindabella SCA.

Fire management in the park is in accordance with the Draft Fire Management Plan. Local Rural Fire Service Brigades have assisted with the implementation of fire mitigation measures such as the maintenance of strategic fire trails, provision of additional water points, production of a high quality fire operations map, hazard reduction operations, asset identification and protection measures, coordination of inter-agency communications for incident management and pre-season inter-agency training days.

This Draft Fire Management Plan is being reviewed and revised in line with the NPWS Strategy for Fire Management (August 2003). Once adopted, fire management will be in accordance with the adopted fire management strategy.

### Fire history

The pre-European fire history of the park is not well known. Traditional fire practices of Aborigines in NSW have not been well researched and are therefore poorly understood. Aboriginal people are likely, however, to have had burning regimes which encouraged grazing plants in areas in which they hunted game and kept corridors open in lands they travelled through. Lightning was presumably also a major cause of fire in the area.

Banks (1989) noted a significant increase in fire frequency for the Brindabella's from 1860. In the 100 years 1860 to 1960 the most common cause of fires was burning undertaken by graziers or stockmen. It is believed that stockmen burnt the mountain forests regularly to encourage palatable growth for stock and maintain accessibility. Major fires often developed in drier seasons. In more recent years the major cause of fire has been lightning with occasional fires caused by arsonists.

In 1944 an area of the Brindabella Range was leased by the NSW government to the ACT Bush Fire Council. Much of this lease area is now part of the park and is subject to activities under the park Draft Fire Management Plan.

A significant El Nino event in 2003 coupled with a severe and widespread lightning event on 8<sup>th</sup> January 2003 resulted in 164 ignitions across south-eastern Australia. Extended periods of high to extreme fire danger resulting from low humidity, high temperatures and strong winds resulted in approximately 1.87 million hectares being burnt across south-eastern Australia with subsequent loss of life and major assets.

Fires in 2003 burnt approximately 94% of the park and also impacted upon surrounding lands and assets. Rural assets in both NSW and ACT and the Western fringes of Canberra's southern suburbs were heavily impacted by fire with 4 deaths and significant property loss. A review of the Draft Fire Management Plan for the park is being undertaken in light of the outcomes from the NSW Inquiries into the January 2003

Fires in the Brindabella Ranges and the Kosciuszko National Park area, other related Fire Inquires, and the ongoing ACT Inquiry into the January 2003 bushfires.

### **Ecological requirements**

Fire frequency, intensity and season of occurrence are major factors influencing the distribution and composition of plant and animal communities. A variety of fire regimes is needed in order to conserve floristic diversity and provide diversity of habitat for animals. The Draft Fire Management Plan for the park identifies thresholds for each of the broad vegetation groups.

### **Co-operative arrangements**

Under the *Rural Fires Act, 1997* the NPWS is a fire authority and is responsible for controlling fires on the park and ensuring that they do not cause damage to other land or property. An important part of NPWS fire management is participation in local co-operative fire management arrangements. The Southern Tablelands and Riverina Highlands Zone Bush Fire Management Committee's cover the park. They aim to coordinate fire management and fire control on a local basis.

In December 1996 NPWS signed a Cross-Border Agreement on fire management and suppression with the ACT Rural Fire Service which recognises that Kosciuszko and Brindabella National Parks and Scabby Range and Bimberi Nature Reserves adjoin Namadgi National Park across the NSW/ACT border. The Agreement defines working arrangements between the two agencies and contains specific agreements for reserve closures, entering lands for fire suppression, detection, communications, information exchange, training and a system to co-ordinate incident control operations.

Bushfire suppression operations may require the construction of temporary trails, helipads and control lines.

### **Strategic Fire Access**

A strategic overview of trails within the park has identified the requirement to enhance access for fire fighting vehicles by upgrading some of the existing trail network. No new trails are proposed. This improved access will allow for quick response to fire incidents by a range of fire vehicles and machinery. The majority of the work will involve the installation of culverts to replace existing roll-over drains. This will allow for dozers to be floated further into the park for fire suppression purposes. Cross-border liaison with the ACT is critical in ensuring trail standards are consistent on both sides of the border.

Proposed enhancements, which will be implemented as funding permits, are:

- Upgrade to BFCC Secondary and float standard (with culverts):  
Blue Range Rd, Doctors Flat Rd, Maginot FT, Two Sticks Rd (Curries Rd to Blue Range Rd) & Webbs Ridge FT (Doctors Flat Rd to Waterfall FT).
- Upgrade to NPWS Management (Cat 1 accessible):  
Firebreak Trail.
- Upgrade to NPWS Management (Cat 7 accessible):  
Baldy Range FT, Dingi Dingi FT, Bells Camp FT, Coree Summit Trail (Pabral Rd to Two Sticks Rd), , Farm FT, Folly FT, Genges Trail, Gentle Annie Trail, Kenya FT, Pabral FT, Pig Hill FT, Pig Hill Summit Trail, Powerline FT, Tinkers Creek FT & Waterfall Trail.



- Maintain to NPWS Management (Cat 9 accessible):  
Bag Range FT, Flannigans Hill Trail, Graces FT, Lowells Flat Trail, McDonalds Flat Trail, McIntyres Trail, Mitchells Ringings Trail, Old Brindabella Rd, Radiata FT, Two Sticks Rd (Mountain Creek Rd to Blue Range Rd) & Webbs Ridge FT (Waterfall FT to Gentle Annie Trail).

## **Policies**

- Broad primary fire management objectives of the NPWS are to:
  - protect life, property and community assets on and adjacent to the park from the adverse impacts of fire;
  - develop and implement cooperative and coordinated fire management arrangements with other fire authorities, reserve neighbours and the community;
  - manage fire regimes within reserves to maintain and enhance biodiversity;
  - protect Aboriginal sites, historic places and culturally significant features known to exist within New South Wales from damage by fire;
  - assist other fire agencies, land-management authorities and land holders in developing fire management practices to conserve biodiversity and cultural heritage across the landscape.
- The Draft Fire Management Plan for the park proposes the following fire management objectives:
  - reduce the occurrence of human-caused unplanned fires in the park;
  - suppress unplanned fires occurring in the park;
  - minimise the potential for the spread of bushfires within, from or into the park;
  - protect from bushfires occurring in the park, persons and property in, or immediately adjacent to the park;
  - protect Aboriginal sites, historic places and culturally significant features known to exist within the park from damage by fire;
  - manage fire regimes for the protection of the range of plant and animal communities within the park, with particular attention to the maintenance of populations of threatened or regionally significant species;
  - support pest plant and animal management activities;
- Prescribed burning and asset protection zone maintenance will be undertaken to reduce fuel levels. Monitoring will be undertaken of the impact of hazard reduction programs on vegetation composition and structure.
- Prescribed burning may also be undertaken to produce/maintain habitat suitable for species with specific requirements. Prior to any such burning an assessment of vegetation characteristics and the status of key species in the area will be undertaken to determine the need for fire and its likely ecological effect.

- The NPWS will maintain a fire trail network for the park to support fire suppression and prevention operations.
- The use of heavy machinery for fire suppression will where possible avoid significant plants, Aboriginal sites and historic places, swamps and heathland.
- As far as possible areas disturbed by fire suppression operations will be rehabilitated as soon as practical after the fire.
- Records and maps will be maintained of all fires as they occur.
- Research will be encouraged into the ecological effects of fire in the park to assist with the management of natural and cultural resources.
- Close contact and cooperation will be maintained with volunteer bush fire brigades, fire control officers, ACT Emergency Services Authority and adjoining ACT Land Management Agencies. The NPWS will continue to actively participate in the Riverina Highlands and Southern Tablelands Zone Bush Fire Management Committees.
- As far as possible fuel management will be carried out in co-operation with neighbours.
- Land use planning and development authorities and private developers will be encouraged to incorporate boundary fire breaks and other fuel reduction measures in any development adjacent or in proximity to the park in accordance with the Planning for Bushfire Protection Guidelines (NSW RFS 2001).
- The park may be closed to public use during periods of extreme fire danger.
- NPWS may impose park fire bans when conditions dictate.

### **Actions**

- Actions in the Draft Fire Management Plan for the park will be implemented.
- The Draft Fire Management Plan for the park will reviewed and revised, and once adopted fire management will be in accordance with the adopted fire management strategy.
- Fuel reduction programs will be prepared, in consultation with the relevant Bushfire Management Committee, detailing fuel reduction strategies and trail maintenance requirements in accordance with policies and the Draft Fire Management Plan.
- The Cross-Border Agreement with the ACT Emergency Services Authority will be reviewed on an on-going basis and will continue to be implemented.
- NPWS will maintain a network of trails to support fire management operations within the park and review the strategic value of the trails as required.
- Fire management assets such as water points, helipads, landing grounds and refuge areas will be maintained and extended as the need arises.

## **8. CULTURAL HERITAGE**

Cultural heritage includes both indigenous and non-indigenous histories. It comprises important components of the environment that may have aesthetic, historic, scientific and social significance to present and future generations.

### **8.1 Aboriginal Cultural Heritage**

The park lies within the tribal boundaries of the Ngunawal/Ngunnawal, Wolgalu and Wiradjuri people. Occupation of the area has been dated to approximately 5000 years before European settlement, however, few occupation sites have been recorded.

One archaeological survey has been carried out within the park focusing on the camping areas, however no landscape-wide survey has been undertaken. Those archaeological sites that have been recorded within the park are generally small surface scatters of artefacts or camp sites associated with summit Bogong Moth access routes and waterways. Many of the records are a result of opportunistic observations and the recorded sites should not be regarded as a comprehensive indication of Aboriginal sites within the park.

Archaeological sites are important to Aboriginal communities as they are a testament to their history and associations with an area. Aboriginal people may also have traditional spiritual links with an area and hold knowledge which is important for nature conservation.

The strong attachment of Aboriginal people to the land is acknowledged. While the NPWS currently has legal responsibility for the protection of Aboriginal sites it acknowledges the right of Aboriginal people to make decisions about their heritage. It is therefore policy that Aboriginal communities be consulted about decisions regarding the management of Aboriginal sites and related issues and how the Aboriginal culture and history of an area managed by the NPWS will be promoted and presented.

The involvement of Aboriginal communities in park issues beyond those purely related to protection of sites of significance is regarded as also having benefits for park management.

#### **Policies**

- Relevant local Aboriginal community members will be consulted and actively involved in all aspects of management of Aboriginal sites and values in the park.
- Aboriginal sites will be protected. All works with the potential to impact on Aboriginal sites will be preceded by site identification inspections.
- Aboriginal sites may be opened to the public to encourage an understanding and awareness of Aboriginal culture. However, the location of Aboriginal sites will not be publicised except where:
  - the agreement of the relevant Aboriginal community organisations has been obtained;
  - a conservation study has been prepared and any management works necessary to protect the site from damage have been implemented; and
  - the site will be interpreted to promote public knowledge and appreciation of Aboriginal culture.

#### **Actions**

- Where opportunities exist, the NPWS will encourage joint management activities with Local Aboriginal Land Councils and other relevant local Aboriginal groups on issues related to Aboriginal sites and values in the park.
- An ongoing program of site recording will be developed in conjunction with relevant local Aboriginal community members.
- In close collaboration with the Aboriginal community, oral history projects to document the Aboriginal attachments to the park will be encouraged.
- Advise relevant local Aboriginal groups of major work proposals.
- In conjunction with relevant members of the Aboriginal community, the NPWS will monitor impacts of recreational use and park management activities on Aboriginal sites within the park. Appropriate action will be taken to alleviate any identified adverse impacts.

## 8.2 Historic Places

The Southern Highlands were first traversed by non-Aboriginal people in 1818 when Meehan and Hume encountered the Goulburn Plains and Lake Bathurst. Subsequent visits to the area and the construction of roads resulted in the initial settlement of the Canberra district in 1824. It was not until 1838 that the first non-Aboriginal person, Terence Murray from Yarrawluma, crossed the Brindabella Range. Two years later he climbed Mount Coree. In the ensuing forty years a number of areas surrounding the park were settled and homesteads erected, including “Brindabella” to the south and “Uriarra” to the east. The late 1880s saw limited gold mining activity in the area around the park.

The 1911 selection of the site for Canberra saw commencement of numerous associated infrastructure works including the construction of Cotter Dam to the east of the park. Recreational use of the Brindabella Range followed as a result of the steadily increasing population of Canberra. From the mid-1940s to the late 1960s a limited amount of selective logging took place in areas of the park with suitable timber.

A limited number of sites with historic significance have been recorded from within the park. The two most substantial sites are the Bag Range Hut and Hume Sawmill remains, both of which occur in the north of the park.

The galvanised iron Bag Range Hut is located at the summit of a peak of the northern Brindabella Range and served as a fire look-out during the ACT Bush Fire Council’s lease over the area. This hut was built by Ted Kennedy in late 1942-early 1943 and is significant for the role it played in the history of detection and fighting of bushfires in the area.

The Hume Sawmill is representative of one of the former land uses of the park. An historical study of the sawmill was undertaken in 1996 by students of the Historical Cultural Landscapes course at the University of Canberra. The study identified twenty three major features at the site, dominated by the sawmill itself (comprising concrete/timber remains and trenches), sawn timber remains, a sawdust dump and numerous refuse piles. The study concluded that the sawmill is a significant heritage site due to it being an example of a primary industry integral to Australia’s history. The site also provides insights into an era of human activity and illustrates a unique way of life in the Australian environment. The study recommended a policy of maintenance, ie the continuous protective care of the fabric, contents and setting of the site.

McIntyre's Hut, located upon the Goodradigbee river was built by Les McIntyre in 1948 and served as a fishing retreat for many years. Unfortunately the hut was destroyed by fire under suspicious circumstances in August 1996. In June 2000, subsequent to the area being added to the park, local 4WD and motorcycle club enthusiasts rebuilt the hut utilising much of the old material which remained on site. The appearance of the hut is very similar to the original with only minor historical details requiring future maintenance. The hut is utilised by fishing, trail bike and 4WD groups as a focal point for recreational activities and is maintained by these groups.

Little remains of Coree Hut that was built in the 1950s to provide shelter for fire and forestry crews in the area. Similarly there is minimal evidence of a Eucalyptus distillery which once operated at Top Crossing. A neighbour has advised of an old bridle trail in Brindabella SCA. Mineral exploration was undertaken across the park from the early 1970s to the early 1990s. Currently there are no mineral exploration licences covering the park.

### **Policies**

- The provisions of the Burra Charter (ICOMOS revised 1987) for the conservation of places of cultural significance will guide the management of the cultural heritage of the park.
- An ongoing program of site recording will be developed. Complementary oral history projects to document the history of the park will be encouraged.

### **Actions**

- A Conservation Plan for the Hume Sawmill will be prepared to provide more detailed guidance for maintenance of the site and its interpretation.
- Research into the historic significance of Bag Range Hut will be encouraged. As appropriate, follow up conservation management activities will be undertaken.
- McIntyre's Hut will be retained as an existing structure established by user groups of the area prior to the gazettal of the Goodradigbee section of the park. Liaison between the caretaker groups and the NPWS will be undertaken to ensure future maintenance activities more accurately reflect the original fabric and appearance of the hut as built in 1948.
- Oral history interviews will be recorded to document early European use of, and attachments to, the park.

## 9. USE OF THE AREA

The park will be managed to ensure that its use, whether by the general public, special interest groups, National Parks and Wildlife Service managers or other authorities is appropriate and consistent with the *National Parks and Wildlife Act 1974*, NPWS policies and the management objectives and policies of this plan of management.

The major categories of use that may be appropriate within the park are:

- recreation in a natural setting;
- environmental education and the promotion of natural and cultural heritage conservation;
- scientific research; and
- management operations by the NPWS and other authorities with statutory responsibilities in the area.

The extent to which these categories of use will be provided for in the park is indicated below.

### 9.1 Recreation Opportunities

Visitor monitoring within the park has focussed upon the trail system. Vehicle counts on the more popular trails within the park has identified that approximately 4,600 vehicles or 11,500 people per annum are estimated to visit the park. The majority of the park's recreational opportunities are centred on use of 4WD tracks to appreciate scenic views and the expansive undeveloped nature of the park. Mount Coree in the park's south offers extensive views in all directions and appears to be the most visited site. Little is known about seasonality of visitation but peaks during school and public holiday periods over the warmer summer months are likely.

Observations by NPWS staff and discussions with local landholders indicate that the park is a popular recreational bush driving destination for 4WD enthusiasts and trail bike riders, the majority of whom are Canberra residents. The Two Sticks Road and Webbs Range tracks have received most of this use. There is evidence of a limited amount of bush camping at Coree Flats (located approximately 1 kilometre north of the summit of Mount Coree) and Top Crossing.

The Goodradigbee River and the popular fishing and camping spots of Flea Creek, Lowells Flat and McIntyre's Hut lie within the park on the western boundary. Traffic counters have identified peak summer use patterns of approximately 350 vehicles per month for Flea Creek and approximately 150 to 200 vehicles (including trail bikes) per month for McIntyres and Lowells Flat.

The park's proximity to Canberra, and the national tourism role that Australia's Capital plays, provides the park with a potentially very large recreational catchment.

In a regional context the park is one of several national parks and nature reserves in the northern Australian Alps. Other nearby protected areas include the high profile Kosciuszko and Namadgi National Parks and the smaller Bimberi Nature Reserve. Each of these parks offer a certain range of recreational opportunities for visitors, dependent largely on natural environment and the types of access and facilities provided by park management. Kosciuszko National Park offers a full range of recreation opportunities from solitude and self-reliant recreation in Wilderness areas to the highly developed resort areas of the park. Similarly, Namadgi National Park offers

a diversity of recreational settings from self-reliant bushwalking to developed vehicle-based camping and day-use areas. Both parks are accessed by a range of roads and tracks from sealed roads to 4WD tracks. Bimberi Nature Reserve, accessed by a two wheel drive gravel road, contains two day-use areas with minimal facilities in a remote and undeveloped sub-alpine environment.

The number and diversity of recreational settings available in nearby national parks, combined with the regional constraints on vehicle access, provide a strong case for the park to be managed for a low level of 4WD vehicle and registered trail bike based recreational use in a semi-remote setting. To encourage this outcome, access will be maintained primarily at 4WD dry weather standard and a small number of camping and day use destinations with basic facilities will be provided. Importantly, management of the park at these standards of access and facilities will complement those recreational opportunities available in other national parks and natural areas in the region. Because of the potential for a sudden change in visitor numbers, the NPWS aims to manage the level of access dynamically to ensure the resultant environmental impacts are always minimal and temporary.

A small amount of bushwalking also occurs within the park, mostly within the Mountain Creek area, and there is some cycling and horse riding.

## **Policies**

- Outdoor recreation and environmental education opportunities in the park will be:
  - consistent with the protection of natural and cultural values;
  - directed towards an appreciation and understanding of the natural and cultural heritage of the park; and
  - complement those opportunities available elsewhere in the region, particular within other national parks of the Australian Alps.
- Any works proposed in the park will be preceded by the appropriate environmental impact assessment process according to the prescriptions of the *Environmental Planning and Assessment Act, 1979*.

## **Actions**

- A program to assess visitation levels, focal points and park user expectations along with a monitoring program to identify environmental impacts upon recreational use areas will be developed and implemented.
- Liaise with adjoining land managers to identify the future requirements for a regional recreation strategy that encompasses current and future visitor expectations and recreational opportunities in the region.

### **9.1.1 Vehicle Access**

Vehicle access to and within the park is by way of 4WD standard roads, due largely to the topographic and soil constraints of the area. None of the roads in the park are declared public roads.

Access to the park is via two main 4WD roads. Doctors Flat Road passes through the north of the park between Uriarra and Wee Jasper. Brindabella and Two Sticks Roads access the park from the south. Vehicle access within the park is limited to 4WD roads that traverse the two parallel north/south ridge lines and several link roads between the

ridgelines. One of the link roads lies beneath a powerline in the park's south which was established for maintenance purposes, although it is now frequently used for recreational driving and access to the Goodradigbee River west of the park.

The network of roads and tracks in the park is a result of past uses of the park, primarily fire management activities. NPWS regularly undertakes maintenance work on the park's major roads.

Due to the topography and soils of the park, some park roads may become impassable after rain. Large scale and expensive road construction works would be required to establish and maintain all weather access roads in the park.

Access to the park may need to be restricted during periods of extreme fire danger or when soil moisture content is high due to significant rain and/or snow fall.

### **Policies**

- Vehicles, including registered trail bikes, will be permitted on park roads only.
- Park roads comprising the public access system and car parks will be maintained to a minimum of dry weather 4WD standard.
- During conditions of extreme fire danger or high soil moisture content from significant snow or rainfall, and during fire operations, park roads may be temporarily closed to public use.
- Roads may be closed to public vehicles for extended periods where excessive rutting or soil erosion is occurring.
- Close consultation with 4WD and motorcycle clubs will be undertaken to promote the protection of the parks' natural and cultural values.
- Vehicular tracks not recommended for public use or management purposes will be closed and allowed to revegetate. Where required, rehabilitation works may be carried out to assist the natural revegetation process.

### **Actions**

- A program to regularly monitor the condition and level of use of all park roads will be established. Monitoring will allow the identification of any areas where future periodic/seasonal closures may be required to maintain road standards within current resource allocations. The future management of any road identified as being of concern due to overuse during adverse seasonal conditions will be discussed with 4WD and motorcycle clubs as part of regular consultation on the management of the park.
- Inappropriate use of roads causes excessive wear and will result in road closure for extended periods. Public information will be updated to include advice that roads may be closed for extended periods where excessive damage is occurring.
- Education and enforcement operations will be undertaken with both NSW and ACT Police and adjoining management agencies to ensure use of the area is restricted to registered vehicles.
- Close and rehabilitate/revegetate vehicular tracks not required for public or management purposes.



## 9.1.2 Camping and Day Use

### (i) Camping

Camp grounds along the Goodradigbee river receive regular patronage with more intense visits during summer, public holiday and school holiday periods. Flea Creek camp ground is the most accessible of the river camp grounds and receives regular weekend, overnight and day use.

The McIntyre's Hut area is also a popular camping area but involves extended travel time on rough trails. Lowells Flat is located upstream from McIntyre's and receives limited camping use.

Top Crossing and Coree Flats are more informal camp grounds and receive limited use.

Site plans have been prepared for the camping and day use areas in the park (Out in the Open, 2004). These plans will be implemented over time and as funds permit. The plans provide for campsites and a toilet on the terrace above Flea Creek, with overflow camp sites on the other side of the creek if necessary. A separate picnic area and parking area will be provided at the junction of the Goodradigbee River and Flea Creek. Group and family camping sites and toilets will be provided at McIntyres Hut. Picnic areas will be provided near the hut and vehicles will be kept back from the hut. Campsites and a toilet will also be provided at Lowells Flat.

### (ii) Day Use

Mount Coree is the most visited site within the park. It is accessed by a rocky 4WD track and comprises a small poorly defined clearing used for car parking and a short walking track leading to an ACT Rural Fire Service fire tower. The summit area provides 360 degree views of the northern Australian Alps and adjoining slopes. Black Mountain Tower and metropolitan Canberra are also visible. The park boundary bisects the summit of Mount Coree so that part of the summit is within the park and part is within the ACT managed Namadji National Park.

In its present form the summit of Mount Coree has a number of visitor management issues, the most serious of which are the steepness of the access road and associated erosion, and the undefined and limited car parking at the summit. Natural vehicle barriers have been positioned at the peak of Mount Coree to address visitor safety issues.

The Hume Sawmill in the park's north receives limited visitor use. The site is signposted, however no visitor management facilities are in place. Pig Hill, immediately outside the eastern boundary of the park is a popular hang gliding site and is accessed via the park road.

## Policies

- Site plans have been developed for Flea Creek, McIntyres Hut, Lowells Flat, Coree camp and Top Crossing. These areas will remain open to the public and may include low key facilities such as fire rings, toilets, signage and designated camping sites.
- Mount Coree will be maintained as a day use area and a comprehensive site design process for the area will be undertaken in consultation with Environment ACT. The provision of visitor facilities will be addressed in the site design process, but will be limited to measures necessary for environmental and cultural heritage

protection, public safety, control of vehicles and the provision of interpretive information.

- The provision of a small car park and an historical interpretive walk will be investigated for Hume Sawmill. No other facilities will be provided.
- The use of portable fossil fuel driven generators will not be permitted unless when used to assist a person in managing a disability. The use of chainsaws will not be permitted within the park unless in an emergency.
- Open fires will only be permitted at the recognised camping areas at Flea Creek, McIntyre's Hut, Lowells Flat, Coree Flat and Top Crossing. All other areas of the park will be promoted as "fuel stove only" areas.
- The Pig Hill Summit Road will be maintained to dry weather 4WD standard to provide access for hang gliding/paragliding enthusiasts. The take-off area on Pig Hill summit is not located within the park.

### **Actions**

- The plans for formalising and protecting the day use and camping areas at Flea Creek will be implemented over time as funds permit.
- The site plans for McIntyres Hut and Lowells Flat will be implemented as funding becomes available.
- A comprehensive site design process will be undertaken for Mount Coree Day Use Area. This may involve a walking track from Coree Camp to Coree Peak, and management of vehicle access to Coree Peak to address safety issues. The site design process will address:
  - the condition and maintenance of the access road;
  - the capacity and most appropriate location of the car park;
  - public safety at the summit,
  - the provision of interpretive information; and
  - the continuation or otherwise of public access to the ACT Rural Fire Service's fire tower.
- A small car park and an interpretive walk will be developed at the Hume Sawmill site.

### **9.1.3 Bicycle Riding**

The riding of bicycles in some areas managed by NPWS is recognised as an appropriate activity to facilitate an understanding and enjoyment of the natural environment. It is important that recreational cyclists can enjoy opportunities available for bicycle riding in the park without conflict with other park users or adversely affecting natural and cultural values.

The park currently receives a very low amount of use by mountain bike riders, much of which is concentrated in the Mount Coree area. It is expected that the amount of mountain bike riding in the park will steadily increase from its current low levels.

## **Policies**

- Cycling is permitted on roads and management trails within the park.
- Cycling will not be permitted on designated walking tracks within the park.
- Periodic closure of park roads to bicycle riding may occur. Such closures will be consistent with closure of vehicular access to the park (Section 7.1.1).

## **Action**

- Subject to the level of mountain bike use of the park, the NPWS will prepare visitor information, such as information leaflets, suggesting preferred cycling routes and codes. Any such visitor information will be consistent with the existing Mountain Bike Code of the Australian Alps Liaison Committee.

### **9.1.4 Horse Riding**

The park is infrequently used by a small number of local horse riders. The many other natural areas closer to Canberra and its rural-residential hinterland mean that it is likely that horse riding in the park will continue to be at low levels.

A horse riding code of practice has been developed by the Australian Trail Horse Riders Association and the NPWS and explains a range of suggested riding practices within national parks.

## **Policies**

- Day use recreational horse riding will be permitted on all public vehicular access roads in the park. Off-road riding will not be permitted.
- Overnight camping of horses in the park will not be permitted.
- Organised group rides involving 10 or more riders, including endurance rides, in the park will require a permit and will be individually assessed and determined by NPWS on the basis of potential erosion and other environmental impacts and conflicts with vehicles.
- Periodic closure of park roads to horse riding may occur. Such closures will be consistent with closure of vehicular access to the park (Section 7.1.1).

## **Action**

- Consultation with horse riding groups will be undertaken to promote information exchange and the protection of the parks' natural and cultural heritage values.

### **97.1.5 Rock Climbing and Abseiling**

Mt Coree provides a limited range of rock climbing experiences. Use of the slopes and cliffs surrounding Mt Coree appears minimal due to difficult climbing grades, loose rock and the presence of more accessible sites closer to Canberra. Rock climbing and abseiling can cause environmental damage through the dislodgement of rocks, placement of bolts and anchor points and disturbance of nesting birds.

## Policy

- Visitors undertaking rock climbing/abseiling activities will be encouraged to utilise natural or existing anchor points. The installation of new anchor points or bolts will not be permitted.

### 9.1.6 Commercial Recreation Activities and Services

The park has the potential to provide opportunities for commercial recreation and educational tours that are consistent with the overall strategy for the park. Such tours are required to be licensed under the *National Parks and Wildlife Act, 1974*. These activities should complement park management and provide increased opportunities for visitors, consistent with the objectives of this plan of management. The performance of commercial operators in the park will provide the NPWS with an opportunity to more extensively promote the importance of nature conservation and cultural heritage conservation.

A limited number of commercial operators formerly used areas of the park. The most common commercial operators were 4WD tours who typically visited Mount Coree as part of a more extensive tour of the northern Australian Alps. Occasional use was also made of the park's 4WD tracks through to the Doctors Flat Road. All of the tours used the park area as a day use destination only, although some operators occasionally camped at McIntyre's Hut ruin on the Goodradigbee River. Commercial horse riding tours very occasionally utilised the northern section of the park, most often remaining on the Doctors Flat Road.

The NPWS policy on commercial recreation activities requires that all commercial operators are licensed and hold appropriate public liability cover.

## Policies

- Commercial operations within the park will be permitted consistent with the overall recreational strategy of offering opportunities for recreational activities in a semi-remote, undeveloped setting.
- Commercial operators utilising the park will be licensed.

## 9.2 Promotion and Interpretation

Minimal promotion of the park and the recreational opportunities it provides will assist in fulfilling the park's role as providing recreational activities in an undeveloped natural setting for low numbers of visitors.

Promoting public awareness of NPWS's conservation responsibilities, the natural and cultural values of the park as well as appropriate recreational opportunities is a major aspect of visitor use management. Increased public awareness and understanding can assist with the achievement of natural and cultural heritage management and enhance visitor enjoyment of the park.

Existing facilities and programs that promote public awareness and appreciation of the park are limited. A NPWS produced brochure that offers general park information is available. Strategically placed park identification signs have been erected at park entrances. Currently, there is a lack of visitor orientation information in the park.

## Policies

- Consistent with the desired role of the park to provide semi-remote opportunities for vehicle-based recreation for low numbers of visitors, the NPWS will not undertake a major promotional campaign highlighting the park and what it offers to recreational users.
- Understanding and appreciation of the natural and cultural values of the park by the public will be promoted. The following themes will be emphasised in interpretation programs:
  - the Aboriginal and non- Aboriginal cultural value of the park, past and present uses of the area and the parks importance to the contemporary Aboriginal and non-Aboriginal community;
  - vegetation communities, their reservation status and habitat value for native fauna;
  - the impact of fire on the park’s ecology and the need for responsible visitor behaviour in assisting with fire prevention; and
  - the appropriate recreational use of the park, and the need for occasional temporary closure of the park due to snow, trail conditions or high fire danger periods.
- Promotional material and interpretive programs will be designed to promote care for the environment, particularly through responsible visitor behaviour in assisting with fire prevention, and thereby assist the NPWS in protecting natural and cultural heritage values. Activities regarded as illegal within the park will also be highlighted.
- Promotional material and interpretive programs will be designed to promote visitor safety and will highlight issues such as the lack of potable water in the park, low winter temperatures and dangers to park visitors through the irresponsible use of fire.

### **Actions**

- As resources allow, interpretive facilities will be provided at:
  - Mount Coree Day Use Area where the park’s role in the Australian Alps network of protected areas and regional land use patterns may be explained; and
  - Designated areas identified during the user expectation survey and as recommended in the site planning for camping areas.

### **9.3 Neighbour Relations**

An important aspect of the NPWS public awareness program is to keep members of the local community, neighbours, Shire Councils and other government agencies informed of management programs particularly regarding fire management and weed and feral animal control. The park has numerous neighbours with an active interest in the management of the park. Issues to address with neighbours include fire management control measures, exotic plant and feral animal control (particularly wild dogs), illegal grazing and woodcutting within the park.

### **Policy**

- Emphasis will be placed on explaining park management programs and actions to the local community, neighbours and stakeholders. The assistance of the South West Slopes Regional Advisory Committee will be sought.

### **Actions**

- The NPWS will explain park management programs through the timely issuing of media releases, information sheets and through ongoing planned and opportunistic discussion with neighbouring land managers.
- Maintain contact with South West Slopes Regional Advisory Committee.
- Personal contact with local landholders and recreational user groups will be undertaken by field staff, including regular neighbour visits and park patrols during periods of peak visitation.

### **9.4 Research**

NPWS does not currently have the resources to undertake long-term monitoring or research and relies heavily on work from outside institutions. The NPWS has to date co-ordinated a number of research projects into the natural and cultural values, and appropriate management of the area. These projects have offered invaluable information for incorporation into this Draft Plan of Management and the Draft Fire Management Plan. The major project to date has been a vegetation survey conducted by the CSIRO's Division of Wildlife and Ecology.

The need for research into park management issues has been identified in a number of sections in this plan. Research projects to be undertaken in the park are required to be licensed by NPWS.

### **Policies**

- The park will be available for appropriate research.
- NPWS conducted research will aim to provide information on natural and cultural heritage and on human use in order to facilitate improved management of the park.
- Researchers from other organisations will be encouraged to undertake research that provides information of use for management purposes.
- 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.
- Research structures must be placed in locations that will minimise their visual impact. Such structures must be removed upon completion of the research project.

## Action

- A prospectus will be prepared as a guide to preferred research projects in the park, particularly those of direct relevance to management, and will include:
  - additional surveys of the distribution, abundance and habitat requirements of endangered or vulnerable native fauna, including those species predicted to occur within the park;
  - the impact of feral animals on the park's native flora and fauna, particularly its threatened species;
  - fire management related research as described in the Draft Fire Management Plan such as:
    - flora and fauna responses to fire, especially threatened species;
    - increased knowledge of the park's fire history;
    - animal refuges, post fire dispersal and recolonisation requirements; and
    - remote sensing techniques for assessing fire impacts.
  - in consultation with relevant local Aboriginal community members, surveys of Aboriginal sites and areas of cultural significance;
  - the historic significance of Bag Range Hut; and
  - qualitative and quantitative visitor surveys as well as social and environmental impacts of visitor use.

## 9.5 Management Operations

Management of the park is undertaken by staff of NPWS Queanbeyan Area.

### 9.5.1 Non-NPWS Infrastructure

Powerlines cross the southern section of the park. An easement approximately sixty metres wide has been cleared underneath the powerlines and a 4WD natural surface access track established for maintenance purposes. The powerlines predate gazettal of the park in early 1996. In accordance with Section 153(3) of the *National Parks and Wildlife Act, 1974* easements, or rights of way, for the powerlines will continue to apply. Potential environmental issues with this activity include clearing of native vegetation, accelerated erosion and increased weed numbers.

A Memorandum of Understanding (MOU) between the NPWS and one of the power providers was signed in 2003. This MOU determines access, maintenance and ongoing management arrangements for operations within the park. In addition to this MOU, a more comprehensive Roads Agreement between this power provider and the Department of Environment and Conservation is currently being developed.

Other power line provider activities are covered under the Procedures for Power Line Maintenance in Lands Administered by the National Parks and Wildlife Service of NSW (1994). This agreement requires review.

The ACT Rural Fire Service maintains a fire tower on the summit of Mount Coree and requires access to it during the summer months. Access to the fire tower is through the park.

## **Policies**

- An agreement for access to the ACT Rural Fire Service fire tower at Mount Coree will be established between the NPWS and the ACT Rural Fire Service. Ongoing public access to the fire tower will be resolved during preparation of a site design for the Mount Coree Day Use Area.
- MOUs should exist with all power line authorities operating in the park.
- Powerline easements and associated maintenance and access will be managed in accordance with the NPW Act and agreements established between the NPWS and power line authorities.

## **Actions**

- The NPWS will involve the ACT Rural Fire Service and Environment ACT in the preparation of a site design for the Mount Coree Day Use Area.
- Maintain regular liaison with power providers regarding compliance with Agreements and MOUs for inspection and maintenance of infrastructure within the park.
- Seek the review and update of the Powerline Maintenance Agreement (1994) with power providers.

### **9.5.2 Defence Force Training Activities**

The Australian Defence Forces, particularly the Royal Military College and Australian Defence Force Academy based in Canberra have, in the past, conducted training activities in the park. Most of this use has centred on the north west section of the park in little visited, relatively inaccessible, steep country. As a matter of course the Defence Forces operate with vehicle support in order that environmental impacts may be reduced through the provision of portable toilet and litter facilities. In the case of the park a working protocol with conditions of operation has been established with the Australian Defence Forces that is consistent with the provisions of the NPWS policy on Defence Force Training Activities.

## **Policy**

- Future requests for undertaking Australian Defence Force training activities in the park will be considered in accordance with the NPWS policy on this matter and the existing protocols established for the park. Access may be permitted for defence force vehicles to use management trails in the park.

## **Action**

- Approvals for Defence Force activities in the park will be reviewed annually subject to the acceptability of impacts from previous use.



## PART E. PLAN IMPLEMENTATION

This plan of management is part of the system of management developed by the National Parks and Wildlife Service. The orderly implementation of this plan of management will be undertaken within the annual programs of NPWS Queanbeyan Area. Priorities will be determined during the development of these programs and will be subject to regional priorities, the availability of funding and staff and to any specific requirements of the Director-General or the Minister.

Area programs are subject to a process of on-going review. During such reviews the works and any other activities carried out in the park will be evaluated in relation to objectives laid down in this plan.

In accordance with Section 81 of the *National Parks and Wildlife Act 1974* this plan shall be carried out and given effect to and no operations shall be undertaken in relation to the park unless those operations are in accordance with the plan of management. 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.

As a guide to the implementation of this plan, management proposals outlined in the plan have been prioritised as detailed in the table over the page. The actions in the table are a summarised version of statements appearing in the body of the plan - further details may be gained from the relevant section of the plan. The following criteria have been used to allocate priorities:

### Legend

**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.

**TABLE 3: IMPLEMENTATION TABLE**

Priority	Action
<b>7.1 Geology, Soils and Landscape</b>	
Low	Areas of soil erosion will be mapped and prioritised for rehabilitation works.
<b>7.3 Native Vegetation</b>	
Low	The NPWS will undertake monitoring of the abundance and vigour of vegetation species in order to gauge and improve the effectiveness of management actions.
Medium	Research will be encouraged to confirm the presence and distribution of Button Wrinklewort.

<b>Priority</b>	<b>Action</b>
<b>7.4 Introduced Vegetation</b>	
Medium	The NPWS will co-ordinate the completion of a comprehensive survey and subsequent mapping of weed species within the park.
Medium	Exotic pines will be controlled. Juvenile trees will be controlled before they are old enough to set seed.
Medium	Priority weed species will be controlled and if possible eradicated. Priority for annual control treatment will be given to blackberry, briar rose and pine trees as well as other noxious or invasive species (eg St. Johns Wort) which may be identified in the park during the life of this plan.
Medium	Weed species impacting upon recreational use areas of the park will be targeted as a priority. These areas include the extensive blackberry infestations along the Goodradigbee River at Flea Creek, McIntyres Hut and Lowells Flat camping areas.
<b>7.5 Native Animals</b>	
Medium	Survey into the presence of fauna species of significance predicted to occur, as well as the parks bat and invertebrate populations will be encouraged.
Medium	Management actions contained in Species Recovery Plans for species of significance known or likely to occur in the park will be implemented.
Low	Research into the distribution, abundance and habitat requirements of those endangered or vulnerable aquatic and terrestrial species recorded in the park will be encouraged.
<b>7.6 Introduced Animals</b>	
High	Feral animal control programs targeting wild dogs, feral pigs and foxes, as well as other feral species which may be identified in the park, will be developed. Such programs will be implemented as a priority in consultation with adjoining neighbours, Yass RLPB and land management agencies. These programs will be co-ordinated to effectively implement programs across a number of land tenures.
Medium	Research into the impact of feral animals on the parks native flora and fauna, particularly endangered and vulnerable species, will be encouraged.
<b>7.7 Fire Management</b>	
High	Actions within the Draft Fire Management Plan will be implemented.
High	The Draft Fire Management Plan for the park will reviewed and revised, and once adopted fire management will be in accordance with the adopted fire management strategy.
High	Fuel reduction programs will be prepared, in consultation with the relevant Bushfire Management Committee, detailing fuel reduction strategies and trail maintenance requirements in accordance with policies and the Draft Fire Management Plan.

<b>Priority</b>	<b>Action</b>
Medium	The Cross-Border Agreement with the ACT Emergency Services Authority will be reviewed on an on-going basis and will continue to be implemented.
High	NPWS will maintain the network of trails to support fire management operations within the park and review the strategic value of the trails as required.
High	Fire management assets such as water points, helipads, landing grounds and refuge areas will be maintained and extended as the need arises
<b>8.1 Aboriginal Cultural Heritage</b>	
Medium	Where opportunities exist, the NPWS will encourage joint management activities with Local Aboriginal Land Councils and other relevant local Aboriginal groups on issues related to Aboriginal sites and values in the park.
Medium	An ongoing program of site recording will be developed in conjunction with relevant members of the local Aboriginal community.
Low	In close collaboration with the Aboriginal community, oral history projects to document the Aboriginal attachments to the park will be encouraged.
Medium	Advise relevant Local Aboriginal groups of major work proposals.
Medium	In conjunction with the Aboriginal community, the NPWS will monitor impacts of recreational use and park management activities on Aboriginal sites within the park. Appropriate action will be taken to alleviate any identified adverse impacts.
<b>8.2 Historic Places</b>	
Medium	A Conservation Plan for the Hume Sawmill will be prepared to provide more detailed guidance for maintenance of the site and its interpretation.
Medium	Research into the historic significance of Bag Range Hut will be encouraged. As appropriate, follow up conservation management activities will be undertaken.
Medium	McIntyre's Hut will be retained as an existing structure established by user groups of the area prior to the gazettal of the Goodradigbee section of the park. Liaison between the caretaker groups and the NPWS will be undertaken to ensure future maintenance activities more accurately reflect the original fabric and appearance of the hut as built in 1948.
Medium	Oral history interviews will be recorded to document early European use of, and attachments to, the park.

<b>Priority</b>	<b>Action</b>
<b>9.1 Recreation Opportunities</b>	
High	A program to assess visitation levels, focal points and park user expectations along with a monitoring program to identify current impacts upon recreational use areas will be developed and implemented.
Medium	Liaise with adjoining land managers to identify the future requirements for a regional recreation strategy that encompasses current and future visitor expectations and recreational opportunities in the region.
<b>9.1.1 Vehicle Access</b>	
Medium	A program to regularly monitor the condition and level of use of all park roads will be established. Monitoring will allow the identification of any areas where future periodic/ seasonal closures may be required to maintain track standards within current resource allocations. The future management of any track identified as being of concern due to over use during adverse seasonal conditions will be discussed with 4WD and motorcycle clubs as part of regular consultation on the management of the park.
Medium	Inappropriate use of trails causes excessive wear and will result in trail closure for extended periods. Public information will be updated to included advice that roads may be closed for extended periods where excessive damage is occurring.
Medium	Education and enforcement operations will be undertaken with both NSW and ACT Police and adjoining management agencies to ensure use of the area is restricted to registered vehicles.
Medium	Close and rehabilitate / revegetate vehicular tracks not required for public or management purposes.
<b>9.1.1 Camping and Day Use</b>	
High	The plans for formalising and protecting the day use and camping areas at Flea Creek will be implemented over time as funds permit.
Low	The site plans for McIntyres Hut and Lowells Flat will be implemented as funding becomes available.
High	A comprehensive site design process will be undertaken for Mount Coree Day Use Area.
Medium	A small car park and an interpretive walk will be developed at the Hume Sawmill site.
<b>9.1.3 Bicycle Riding</b>	
Low	Subject to the level of mountain bike use of the park, the NPWS will prepare visitor information, such as information leaflets, suggesting preferred cycling routes and codes. Any such visitor information will be consistent with the existing Mountain Bike Code of the Australian Alps Liaison Committee.

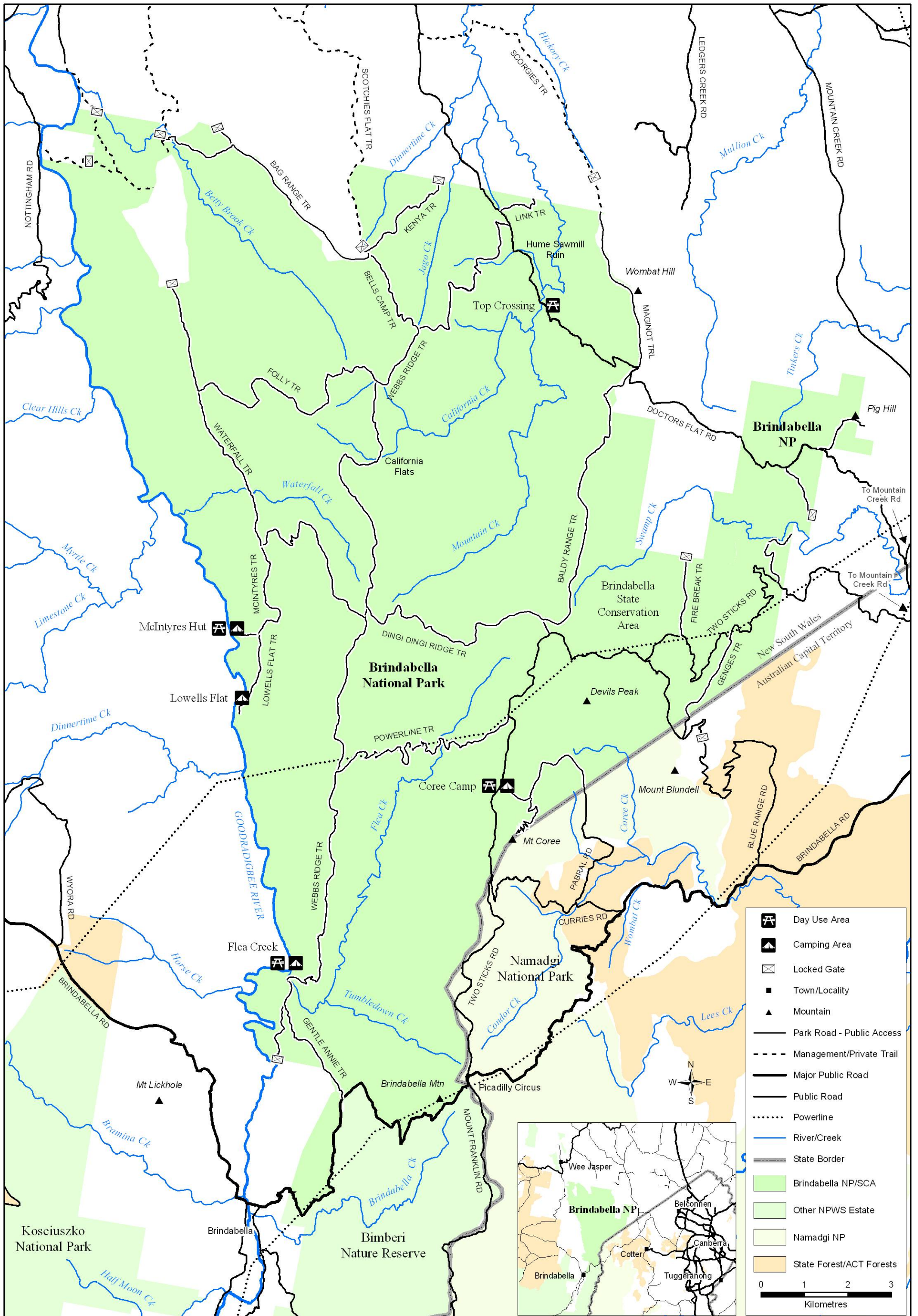
<b>Priority</b>	<b>Action</b>
<b>9.1.4 Horse Riding</b>	
Medium	Consultation with horse riding groups will be undertaken to promote information exchange and the protection of the parks' natural and cultural heritage values.
<b>9.2 Promotion and Interpretation</b>	
Medium	As resources allow, interpretive facilities will be provided at: <ul style="list-style-type: none"> <li>- Mount Coree Day Use Area where the parks role in the Australian Alps network of protected areas and regional land use patterns may be explained; and</li> <li>- Designated areas identified during the user expectation survey and as recommended in the Site Planning for camping areas.</li> </ul>
<b>9.3 Neighbour Relations</b>	
High	The NPWS will explain park management programs through the timely issuing of media releases, information sheets and through ongoing planned and opportunistic discussion with neighbouring land managers.
High	Maintain contact with South West Slopes Regional Advisory Committee
High	Personal contact with local land holders and recreational user groups will be undertaken, including regular neighbour visits and park patrols during periods of peak visitation.
<b>9.4 Research</b>	
Medium	A prospectus will be prepared as a guide to preferred research projects in the park, particularly those of direct relevance to management.
<b>9.5.1 Non-NPWS Infrastructure</b>	
Medium	The NPWS will involve the ACT Rural Fire Service and Environment ACT in the preparation of a site design for the Mount Coree Day Use Area.
Medium	Maintain regular liaison with power providers regarding compliance with Agreements and Memorandum of Understandings for inspection and maintenance of infrastructure within the park.
Medium	Encourage the review and update of the Powerline Maintenance Agreement (1994) with power providers.
<b>9.5.2 Defence Force Training Activities</b>	
Medium	Approvals for Defence Force activities in the park will be reviewed annually subject to the acceptability of impacts from previous use.

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	Day Use Area
	Camping Area
	Locked Gate
	Town/Locality
	Mountain
	Park Road - Public Access
	Management/Private Trail
	Major Public Road
	Public Road
	Powerline
	River/Creek
	State Border
	Brindabella NP/SCA
	Other NPWS Estate
	Namadgi NP
	State Forest/ACT Forests

0 1 2 3  
Kilometres

